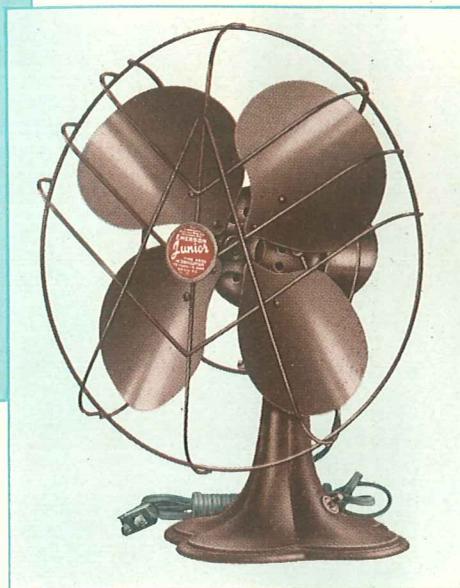
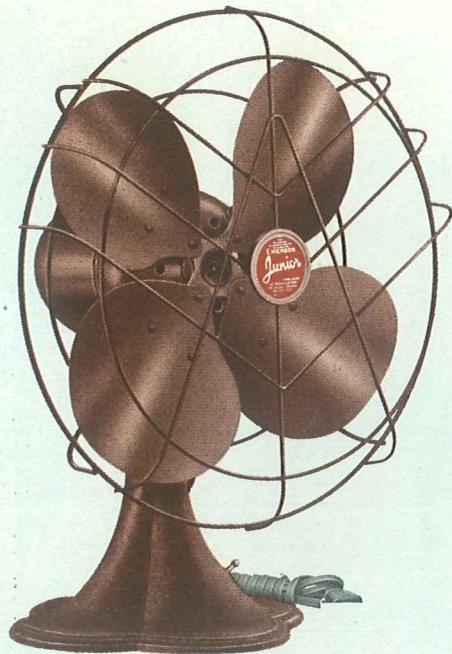


# Emerson-Electric

# Fans for 1946



## Emerson *Junior* Fans

These are the quality fans that sell at popular prices to the great "In-between" fan market. They combine smart appearance, fine performance and long life, in short, the best dollar for dollar fan values offered to appliance merchandisers.

Two sizes, each a volume sales builder in its own right. Check them, feature for feature, compare the prices and you'll agree that these are the fans needed to head up an aggressive fan sales campaign.

*Finer Quality—Greater Value in Every Detail*

|                  |   |                     |  |
|------------------|---|---------------------|--|
| <b>MOTOR:</b>    | Quiet, cool-running, induction type motor — no brushes, commutator, or mechanical starting device. Will not interfere with radio reception. | <b>OSCILLATION:</b> | Provided with adjustment for oscillation in arc of 90° or 45°, also to non-oscillating position — without the use of tools of any kind. Steel oscillating worm is case hardened. |
| <b>BLADES:</b>   | New quiet-type blades. Big breeze capacity.   | <b>GUARD:</b>       | Ornamental wire guard; spot-welded joints.   |
| <b>BEARINGS:</b> | Self-aligning, bearings with felt-packed oil reservoirs.  | <b>BASE:</b>        | Hinged desk-bracket base for wall mounting. Strip-felt base pad.   |
| <b>SHAFT:</b>    | 10-inch fan has $\frac{5}{16}$ -inch diameter steel shaft; and 12-inch fan has $\frac{3}{8}$ -inch diameter steel shaft.                    | <b>CORD:</b>        | All fans have rubber-covered cord, and plug. Approved by Underwriters.   |
| <b>SWITCH:</b>   | Type 2650-B has single-speed toggle switch in base; Type 2660-B has two-speed toggle switch in base.  | <b>FINISH:</b>      | Finished in baked Antique Statuary bronze enamel. Nickeled trimmings.  |

| SIZE | STYLE      | VOLTS | CURRENT | SPEEDS AND WATTS                                       | *AIR DELIVERY | WEIGHT |      | TYPE NO. | CODE WORD |
|------|------------|-------|---------|--|---------------|--------|------|----------|-----------|
|      |            |       |         |  |               | NET    | PKD. |          |           |
| 10"  | Oscillator | 115   | 60 cy.  | 1500 rpm<br>37 watts, single-speed                     | 570 CFM       | 8      | 10   | 2650-B   | SOLET     |
| 12"  | Oscillator | 115   | 60 cy.  | 1575 rpm<br>46 watts      1350 rpm<br>35 watts 2-speed | 875 CFM       | 15     | 22   | 2660-B   | SOMAT     |

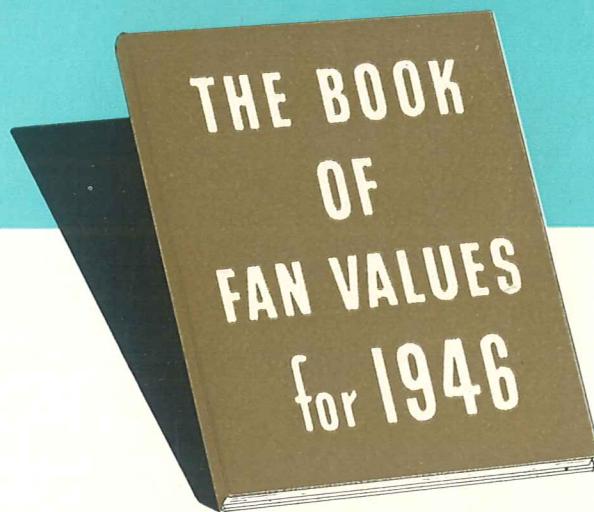
\*CFM—Cubic feet of air per minute.

Regularly carried in stock at St. Louis, New York, Chicago, and by conveniently located wholesalers.

Fans will operate satisfactorily on voltage 10% above or below rated voltage . . . Emerson Junior Fans are satisfactory for operation on 50 cycles—speed and air delivery approximately 15% lower. All data subject to change without notice.

**EMERSON-ELECTRIC STANDARD ONE-YEAR FACTORY-TO-USER GUARANTEE**

# Emerson-Electric Presents



FOR the first post-war season, Emerson-Electric presents, as in pre-war years, products of traditional quality, in a great variety of models.

Due to the four-year backlog of consumer requirements, it has been found necessary to devote all available facilities to the production of the most needed models.

Some few products, such as Silver Swan Fans and Oscillating Stand Fans, are not included, as several kinds of material used in their manufacture are not likely to be in good supply for some time.

The war years served as a quality testing period for all kinds of motorized appliances and equipment. Appliances which failed, and could not be replaced, emphasized the proper relation of price and service. Fans were no exception. The best dollar-for-dollar values continue to be those fans which give their owners dependable service over a long span of years.

For 55 years, Emerson-Electric Fans have led the quality fan field in design—features—expert workmanship—low-cost operation—long life—trouble-free service—in summary, top dollar value by any comparison.

These values are again available in the wide selection of fans offered for 1946, in the pages of this catalog.

## EMERSON EMERSON ELECTRIC ELECTRIC

The EMERSON ELECTRIC MFG. CO.  
ST. LOUIS—NEW YORK—CHICAGO—LOS ANGELES—DAVENPORT—DETROIT

10-inch Overlapping  
Blade Fan  
Pages 2 and 3

Inside Story of  
Fan Design  
Pages 4 and 5

12- and 16-inch  
Overlapping-Blade Fans  
Pages 6 and 7

Parker-Blade  
Fans  
Pages 8 and 9

Direct-Current  
Fans  
Pages 10 and 11

Air  
Circulators  
Pages 12, 13, 14 and 15

Ceiling  
Fans  
Pages 16 and 17

Kitchen  
Ventilators  
Pages 18 and 19

Exhaust  
Fans  
Pages 20 and 21

Cooler  
Fans  
Pages 22, 23, 24 and 25

EMERSON ELECTRIC



**10-inch Overlapping-Blade Oscillator. The Fan  
Sensation — Beauty — Quality — Highest Value**

| SIZE  | STYLE | VOLTS | CURRENT | SPEED AND WATTS   | *AIR DELIVERY | WEIGHT<br>NET   PKD. | TYPE NO. | CODE WORD |
|---|-------|-------|---------|-------------------|---------------|----------------------|----------|-----------|
| OVERLAPPING BLADES—SINGLE-SPEED—ALTERNATING CURRENT |       |       |         |                   |               |                      |          |           |
| 10"   | Osc.  | 115   | 60 cy.  | 1450 rpm 43 watts | 640 CFM       | 11   16              | 6250-D   | SAVOS     |

\*CFM—Cubic feet of air per minute.

Regularly carried in stock at St. Louis, New York, Chicago, and by conveniently located wholesalers.

Fans will operate satisfactorily on voltage 10% above or below rated voltage.

Satisfactory for 50-cycles, speed approximately 15% lower.

Packed one in a box. All data subject to change without notice.

**EMERSON-ELECTRIC STANDARD 5-YEAR FACTORY-TO-USER GUARANTEE**

EMERSON ELECTRIC

Overlapping-Blade  
10-inch Oscillator with  
Polished Bronze Blades

Every Fan Display Should Include  
This Popular Model

This 10-inch, Overlapping-blade Fan with bright bronze blades, and harmonizing finish on other parts, will dominate every fan display in which it is included. The new note in fan beauty is matched by quiet, efficient performance.

Let this fan headline your array of quality, 5-year guarantee fans bearing the Emerson-Electric nameplate.



*Finer Quality - Greater Value in Every Detail*

**MOTOR:** Induction-type motor, no brushes or mechanical starting device. Streamlined enclosing shell over oscillating gear case.

**SHAFT:** Solid-steel shaft,  $\frac{5}{16}$ -inch diameter.

**BEARINGS:** Liberal-size bearings, grooved to distribute the oil evenly.

**LUBRICATION:** Oil fed by cotton wicking from both upper and lower reservoirs.

**SWITCH:** Single-speed toggle switch in base.

**CORD:** Rubber-covered cord and plug attached. Approved by Underwriters.

**BLADES:** Patented Overlapping "Quiet-type" bronze blades with beautifully polished, natural finish.

**OSCILLATION:** Adjusting case provides finger-tip control and instant adjustment of arc of oscillation from 90° to any lower range or stationary position, without tools of any kind.

**GUARD:** Ornamental guard of heavy-gauge wire, spot-welded.

**BASE:** "Patented" friction hinge for tilting fan up or down, or for wall (bracket) mounting. Felt covered base prevents marring of polished surfaces.

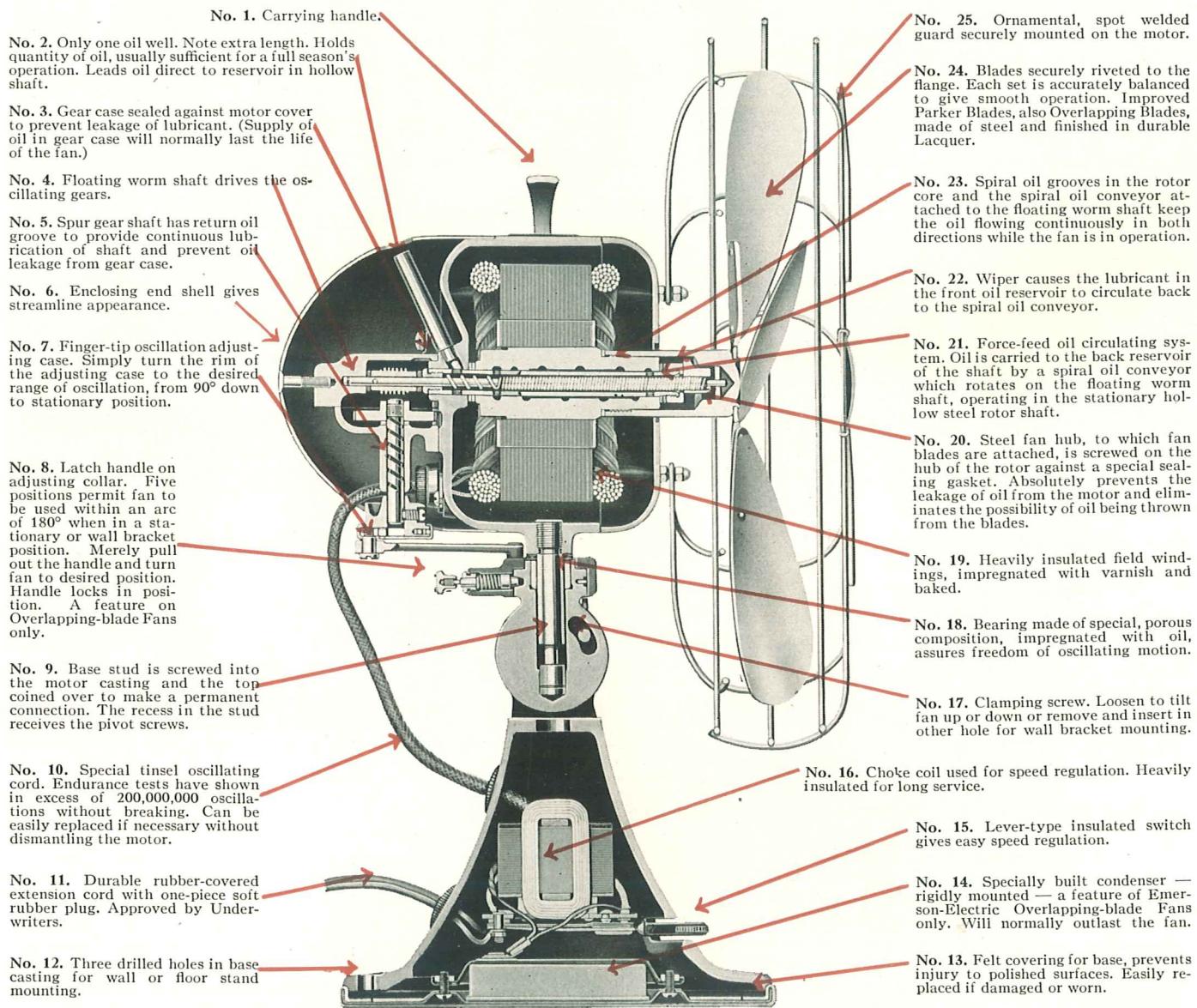
**FINISH:** Finished in lustrous statuary bronze lacquer on motor, base, and guard—blades, highly polished natural bronze.

EMERSON-ELECTRIC SELLS NO APPARATUS AT RETAIL

# The Inside Story

## of EMERSON-ELECTRIC Fan Design

The "Inside Story" is a graphic presentation of the many construction features which distinguish Emerson-Electric 12-inch and 16-inch Overlapping and Parker-blade Fans from all others. It explains why so many of the nation's leading industrial and commercial organizations have standardized on Emerson-Electric Fans—why they are featured by thousands of Fan Retailers.



A full understanding of the refinements in Emerson-Electric design and construction is necessary to appreciate the reputation Emerson-Electric enjoys as the manufacturer of "Long Life Fans."

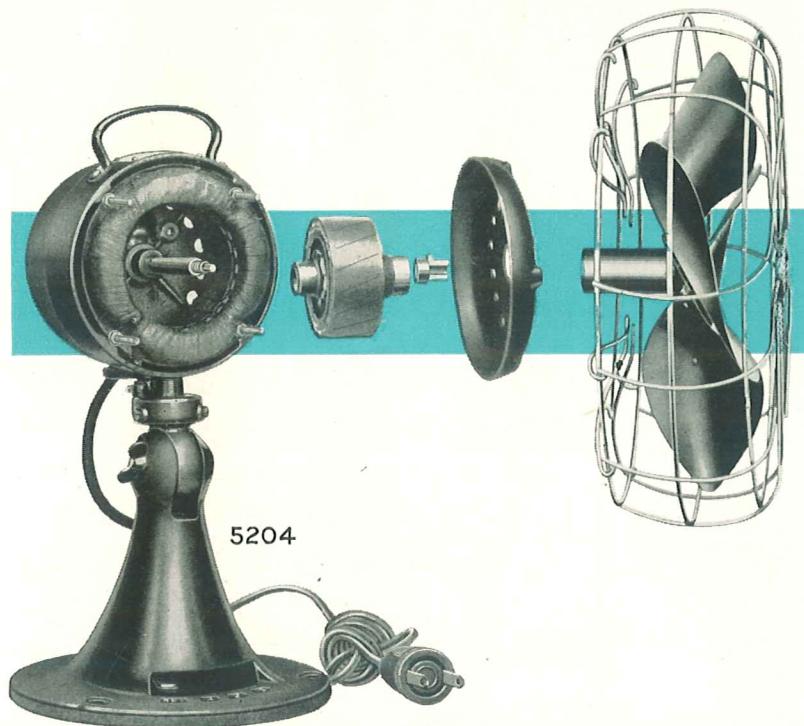
A number of these important features have been basic

in Emerson-Electric Fan construction for over a quarter of a century — proving their worth in actual service. The above illustration is a composite cross-section view of Type 79646-AQ, 12-inch Improved Parker-blade Oscillator and Type 77646-AL, 12-inch Overlapping-blade Oscillator.

EMERSON-ELECTRIC SELLS NO APPARATUS AT RETAIL

## These Fans Do Not Spatter Oil on Walls or Furnishings

### Hermetically Sealed Bearing Prevents Leakage



#### Fan Servicing, Simplified

This illustration shows the simple manner in which a new oscillating cord may be installed in Emerson-Electric Fans, should it ever be required.

It is not necessary to dismantle any part of the fan motor. Merely remove the two screws which hold the oscillating cord bushing plate and pull out the leads to which it is attached. The new cord is then attached to the leads, the leads pushed back into the recess in the fan motor cover, and the bushing plate replaced. The other end of the cord is attached to the proper points in the base after removing the felt-covered base plate.

Every servicing requirement has been given special attention in the design of Emerson-Electric Fans. Users find it is an important advantage in maintaining their fans at full operating efficiency with a minimum of servicing time and expense.



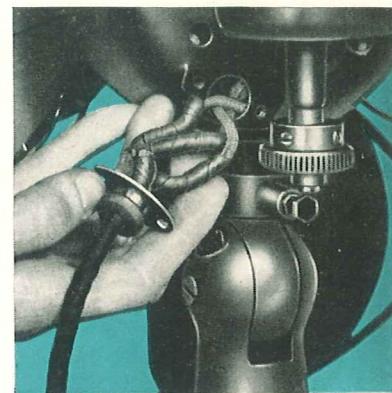
#### Oil-Tight Bearing

This unique oil-tight, dust-proof bearing has been an exclusive feature on Emerson-Electric Fans for over 40 years.

The assembly of armature, blade, and guard, on Emerson-Electric 12 and 16-inch Improved Parker-blade and Overlapping-blade Fans is shown in this illustration. It gives a practical demonstration of the extremely fine construction and simplicity of design.

The armature rotates on a stationary  $\frac{1}{2}$ -inch diameter, case-hardened, hollow-steel shaft pressed into the motor frame. The armature core is porous cast-iron which absorbs oil and the bearing surfaces of both core and case-hardened steel shaft acquire a fine glaze, like plated metal, which makes practically an everlasting bearing.

Each armature core is hand reamed to fit the tapered hollow shaft with which it is used. Each motor assembly is given a 2-hour "run-in" test to assure a perfect bearing fit.



#### Finger-Tip Oscillation Adjustment

For ease of control — simplicity of adjustment and smooth operation, the exclusive oscillation adjustment is one of the outstanding achievements in the Emerson-Electric design.

Finger-tip adjustment from non-oscillating position to any range of oscillation up to  $90^\circ$  is obtained by simply turning the knurled rim of the adjusting case. Adjustment is instantaneous and is accomplished without tools of any kind and with absolute safety even while the fan is in operation.

The "patented" adjusting collar, a feature on 12 and 16-inch Overlapping-blade Fans (handle is shown directly below oscillating link in illustration at left), permits centering the breeze at any one of five positions within a  $90^\circ$  arc without moving the base, and without the use of tools.

The latch handle is locked in position by a tension spring. To change center of oscillation merely pull out the latch handle and swing the motor to the desired location. This is particularly advantageous when the fan is mounted on a horizontal surface or in bracket position on the wall. The oscillating adjusting case and adjusting collar combine to permit adjustment over an arc of  $180^\circ$  with the base in a fixed position.

EMERSON



ELECTRIC

## 12 and 16-inch Fans Patented Overlapping Blades—A. C.

### Two Popular Desk-type Oscillators with All the Newest Features for Quiet, Efficient Service and Convenience in Operation.



These fine fans have gained in public favor year after year, along with the many refinements in design and operating efficiency.

In addition to the many important mechanical features which assure lasting, low-cost service, these fans are styled and finished in keeping with the modern trend, without sacrificing utility.

Recommended for homes, offices, hospitals, hotels, and places of business where style, quiet operation, large breeze capacity and economical, dependable service are necessary.

#### *Finer Quality - Greater Value in Every Detail*

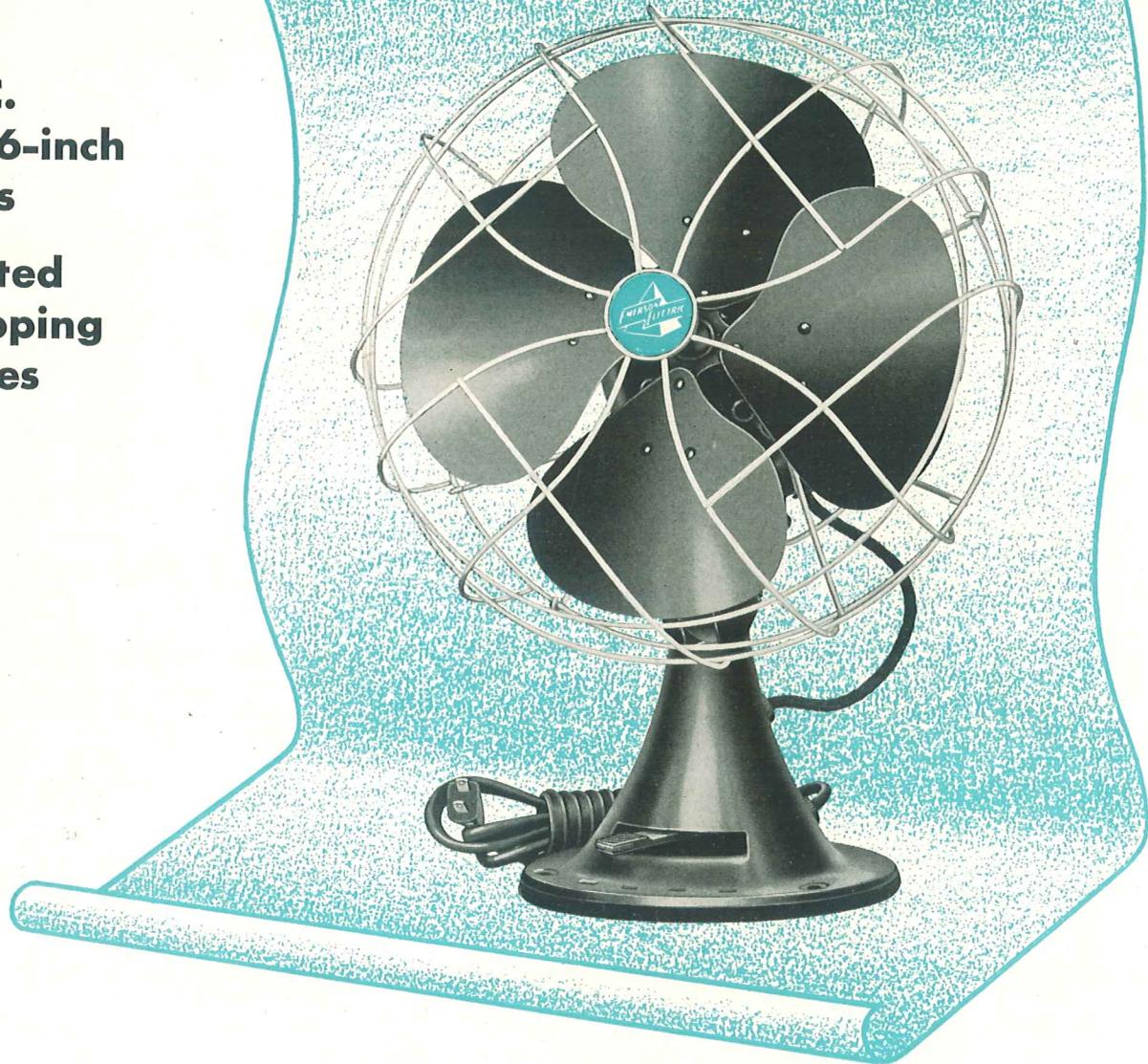
|                       |   |
|-----------------------|---|
| MOTOR:                | Capacitor-type motor, no brushes or mechanical starting device.   |
| SHAFT:                | Case-hardened, $\frac{1}{2}$ -inch diameter, hollow-steel shaft, pressed into motor frame.  |
| BEARINGS:             | Oil-tight dust-proof bearings.  |
| LUBRICATION:          | Oil fed from oil cup at back of motor to hollow shaft. Only one place to oil. Continuous forced-feed circulation system of lubrication.   |
| SWITCH:               | Three-speed sliding switch in base.   |
| CORD:                 | Rubber covered cord and plug attached. Approved by Underwriters.  |
| BLADES:               | Steel—Patented Overlapping “Quiet-type”.  |
| OSCILLATION:          | Adjusting case provides <i>finger-tip</i> control and instant adjustment of arc of oscillation from $90^\circ$ to any lower range or stationary position, without tools of any kind. The Emerson-Electric oscillating mechanism has an enviable service record. It is fully enclosed, which conceals and protects moving parts and is sealed against oil leakage. |
| SWIVEL<br>ADJUSTMENT: | Exclusive Emerson-Electric feature permits changing the center of oscillation arc within a $90^\circ$ radius—5 positions.   |
| GUARD:                | Ornamental guard of heavy-gauge wire, spot welded.  |
| BASE:                 | “Patented” friction hinge for tilting fans up or down, or for wall (bracket) mounting. Felt covering prevents marring of polished surfaces.   |
| FINISH:               | Lustrous baked black enamel on motor and base, blades in satin black lacquer and guard in Udylite finish with blue nameplate.   |

EMERSON-ELECTRIC SELLS NO APPARATUS AT RETAIL

EMERSON ELECTRIC

**A. C.  
12 and 16-inch  
Fans**

**Patented  
Overlapping  
Blades**



**The Quality Fans with Capacitor Motors**

| SIZE | STYLE | VOLTS | CURRENT | SPEEDS AND WATTS                                       |                      |                     | *AIR DELIVERY | WEIGHT<br>NET   PKD. | TYPE NO. | CODE WORD |
|------|-------|-------|---------|--|----------------------|---------------------|---------------|----------------------|----------|-----------|
|      |       |       |         | OVERLAPPING BLADES—STANDARD FINISH—ALTERNATING CURRENT |                      |                     |               |                      |          |           |
| 12"  | Osc.  | 115   | 60 cy.  | 1320 rpm<br>46 watts                                   | 1120 rpm<br>42 watts | 900 rpm<br>38 watts | 1150 CFM      | 22                   | 33       | 77646-AL  |
| 16"  | Osc.  | 115   | 60 cy.  | 1070 rpm<br>60 watts                                   | 925 rpm<br>48 watts  | 800 rpm<br>43 watts | 1700 CFM      | 24                   | 39       | 77648-AL  |

\*CFM—Cubic feet of air per minute on high speed.

Regularly carried in stock at St. Louis, New York, Chicago and by conveniently located wholesalers.

Fans will operate satisfactorily on voltage 10% above or below rated voltage.

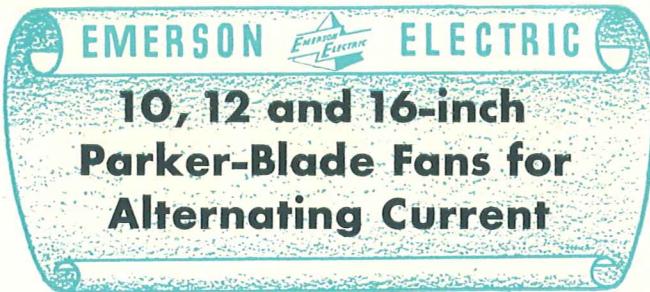
Satisfactory for 50-cycles, speed approximately 15% lower.

Performance data subject to variation of 10% plus or minus.

All fans packed one in a box.

All data subject to change without notice.

EMERSON-ELECTRIC STANDARD 5-YEAR FACTORY-TO-USER GUARANTEE



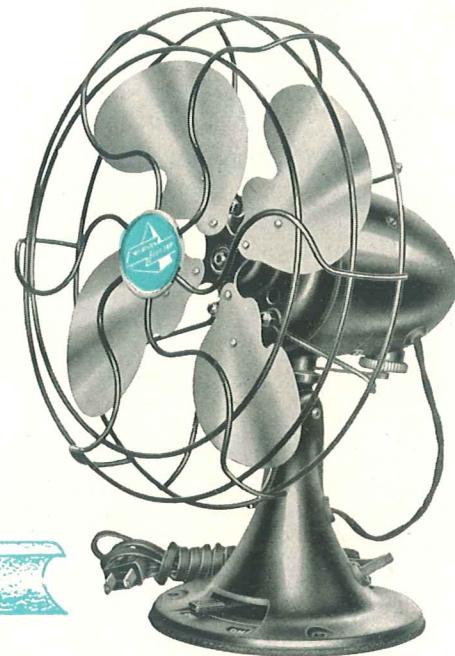
## Parker-Blade Fans Have Led The Field in Sales for Years

Few fans have been accorded the universal acceptance, earned by this famous family of Parker-Blade Fans. Fan buyers, as well as fan retailers, know their value. Consistently, year after year, the rising sales curve has reflected the public's increasing preference for known quality and dependable service.

These fans have been adopted as standard equipment by many of the nation's largest institutions, based on quietness, economical operation, and low-cost maintenance.

*Finer Quality - Greater Value in Every Detail*

|                     |   |
|---------------------|---|
| <b>MOTOR:</b>       | Induction-type motor, no brushes or mechanical starting device  |
| <b>SHAFT:</b>       | <b>10-inch Fan</b> —Solid-steel shaft, $\frac{5}{16}$ -inch diameter.<br><b>12 and 16-inch Fans</b> — $\frac{1}{2}$ -inch diameter, case-hardened, hollow-steel shaft, pressed into motor frame.  |
| <b>BEARINGS:</b>    | <b>10-inch Fan</b> —Liberal-size bearings, grooved to distribute the oil evenly.<br><b>12 and 16-inch Fans</b> —Oil-tight dust-proof bearings.  |
| <b>LUBRICATION:</b> | <b>10-inch Fan</b> —Oil fed by cotton wicking from both upper and lower reservoirs.<br><b>12 and 16-inch Fans</b> —Oil fed from oil cup at back of motor to hollow shaft. Only one place to oil. Forced-feed continuous circulation system of lubrication.  |
| <b>SWITCH:</b>      | <b>10-inch Fan</b> —Single-speed sliding switch in base.<br><b>12 and 16-inch Fans</b> —Three-speed sliding switch in base.   |
| <b>CORD:</b>        | Rubber covered cord and plug attached. Approved by Underwriters.  |
| <b>BLADES:</b>      | Steel, improved Parker Design.  |
| <b>OSCILLATION:</b> | Adjusting case provides <i>finger-tip</i> control and instant adjustment of arc of oscillation from 90° to any lower range and stationary position, without tools of any kind. The Emerson-Electric oscillating mechanism has an enviable service record. It is fully enclosed, which conceals and protects moving parts and is sealed against oil leakage. |
| <b>GUARD:</b>       | Ornamental guard of heavy-gauge wire, spot welded.  |
| <b>BASE:</b>        | "Patented" friction hinge for tilting fans up or down, or for wall (bracket) mounting. Felt covering prevents marring of polished surfaces.   |
| <b>FINISH:</b>      | Type 2450-B, lustrous baked black enamel on motor, base and guard, blades in satin aluminum lacquer, nameplate in blue. Types 79646-AQ and 79648-AQ, lustrous baked black enamel on motor and base, blades in satin black lacquer, guard finished in Udrylite.  |

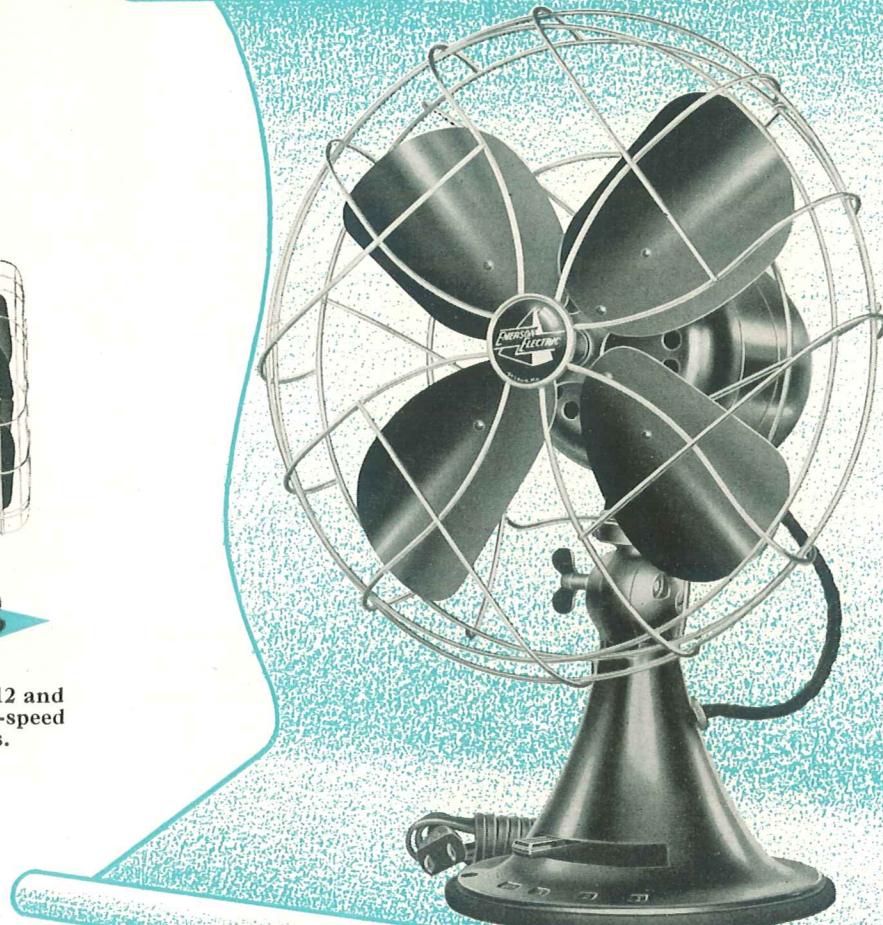


Parker-blade, 10-inch, single-speed oscillator.

EMERSON ELECTRIC



Parker-blade, 12 and 16-inch, three-speed oscillators.



| SIZE   | STYLE | VOLTS | CURRENT | SPEEDS AND WATTS                   |                      |                     | *AIR DELIVERY       | WEIGHT NET   PKD. | TYPE NO. | CODE WORD |
|--|-------|-------|---------|------------------------------------|----------------------|---------------------|---------------------|-------------------|----------|-----------|
|  |       |       |         | 1500 rpm<br>36 watts, single-speed | 1050 rpm<br>53 watts | 940 rpm<br>43 watts | 815 rpm<br>41 watts |                   |          |           |
| <b>PARKER BLADES—STANDARD FINISH—ALTERNATING CURRENT</b> |       |       |         |                                    |                      |                     |                     |                   |          |           |
| 10"  | Osc.  | 115   | 60 cy.  | 1500 rpm<br>36 watts, single-speed |                      |                     | 570 CFM             | 11                | 16       | 2450-B    |
| 12"  | Osc.  | 115   | 60 cy.  | 1050 rpm<br>53 watts               | 940 rpm<br>43 watts  | 815 rpm<br>41 watts | 1025 CFM            | 21                | 33       | 79646-AQ  |
| 16"  | Osc.  | 115   | 60 cy.  | 1000 rpm<br>76 watts               | 850 rpm<br>65 watts  | 700 rpm<br>55 watts | 1550 CFM            | 23                | 39       | 79648-AQ  |

\*CFM—Cubic feet of air per minute—high speed.

Regularly carried in stock at St. Louis, New York, Chicago and by conveniently located wholesalers.

Fans will operate satisfactorily on voltage 10% above or below rated voltage.

Satisfactory for 50-cycles, speed approximately 15% lower.

Performance data subject to variation of 10% plus or minus. All data subject to change without notice.

All fans packed one in a box.

EMERSON-ELECTRIC STANDARD 5-YEAR FACTORY-TO-USER GUARANTEE

EMERSON



ELECTRIC

## 12 and 16-inch Desk Fans for Direct Current

### Overlapping-Blade, Quiet-type Fans for Direct Current

Emerson-Electric direct-current fans, must of necessity be of different motor design than alternating-current fans. The motor is two-pole design and the motor frame and housing fully enclose the windings and working parts while a removable shutter gives ready access to the commutator and permits inspection of the brushes.

The armature is of the semi-enclosed slot type without band wires. The coils are carefully insulated and held

securely in place. The commutator is of liberal size with unusually deep copper segments insulated with the best solid mica and rigidly assembled. Commutator leads are protected by a strong cord wrapping.

These fans have the well-known design features of finger-tip oscillation control, and swivel-adjustment collar which permits changing the center of oscillation, without moving the base.

*Finer Quality-Greater Value in Every Detail*

|                       |   |
|-----------------------|---|
| MOTOR:                | Brush and commutator type—brushes readily renewable without dismantling motor. Fully-enclosed motor.  |
| SHAFT:                | Solid-steel shaft, $\frac{3}{8}$ -inch diameter.  |
| BEARINGS:             | Large-size bearings, grooved to distribute the oil evenly.  |
| LUBRICATION:          | Wool packing holds oil in suspension and cotton wicking feeds it to the shaft and bearing surfaces.   |
| SWITCH:               | Three-speed sliding switch in base.   |
| CORD:                 | Rubber-covered cord and plug attached. Approved by Underwriters.  |
| BLADES:               | Steel—Patented Overlapping Design.  |
| OSCILLATION:          | Adjusting case provides <i>finger-tip</i> control and instant adjustment of arc of oscillation from $90^\circ$ to any lower range or stationary position, without tools of any kind. The Emerson-Electric oscillating mechanism has an enviable service record. It is fully enclosed, which conceals and protects moving parts and is sealed against oil leakage. |
| SWIVEL<br>ADJUSTMENT: | Exclusive Emerson-Electric feature permits changing the center of oscillation arc within a $90^\circ$ radius—5 positions.   |
| GUARD:                | Ornamental guard. Made of heavy-gauge wire, spot-welded.  |
| BASE:                 | "Patented" friction hinge for tilting fans up or down, or for wall (bracket) mounting. Felt covering prevents marring of polished surfaces.   |
| FINISH:               | Lustrous baked black enamel on motor and base—blades, black lacquer, satin finish. Guards finished in Udylite, nameplate in blue.   |

EMERSON-ELECTRIC SELLS NO APPARATUS AT RETAIL

**EMERSON****ELECTRIC**

**12 and 16-inch  
Overlapping  
Blade Fans for  
Direct Current**



| SIZE  | STYLE | VOLTS | CURRENT | SPEEDS AND WATTS     |                      |                     | *AIR DELIVERY | WEIGHT |    | TYPE NO. | CODE WORD |
|---|-------|-------|---------|----------------------|----------------------|---------------------|---------------|--------|----|----------|-----------|
| OVERLAPPING "QUIET-TYPE" BLADES—STANDARD FINISH |       |       |         |                      |                      |                     |               |        |    |          |           |
| 12"   | Osc.  | 115   | D. C.   | 1650 rpm<br>52 watts | 1300 rpm<br>45 watts | 900 rpm<br>35 watts | 1150 CFM      | 25     | 38 | 77046-AA | TAFUH     |
| 16"   | Osc.  | 115   | D. C.   | 1080 rpm<br>64 watts | 920 rpm<br>46 watts  | 740 rpm<br>38 watts | 1700 CFM      | 28     | 43 | 77048-AA | TERIC     |

\*CFM—Cubic feet per minute—high speed.

Regularly carried in stock at St. Louis, New York, Chicago, and by conveniently located wholesalers.

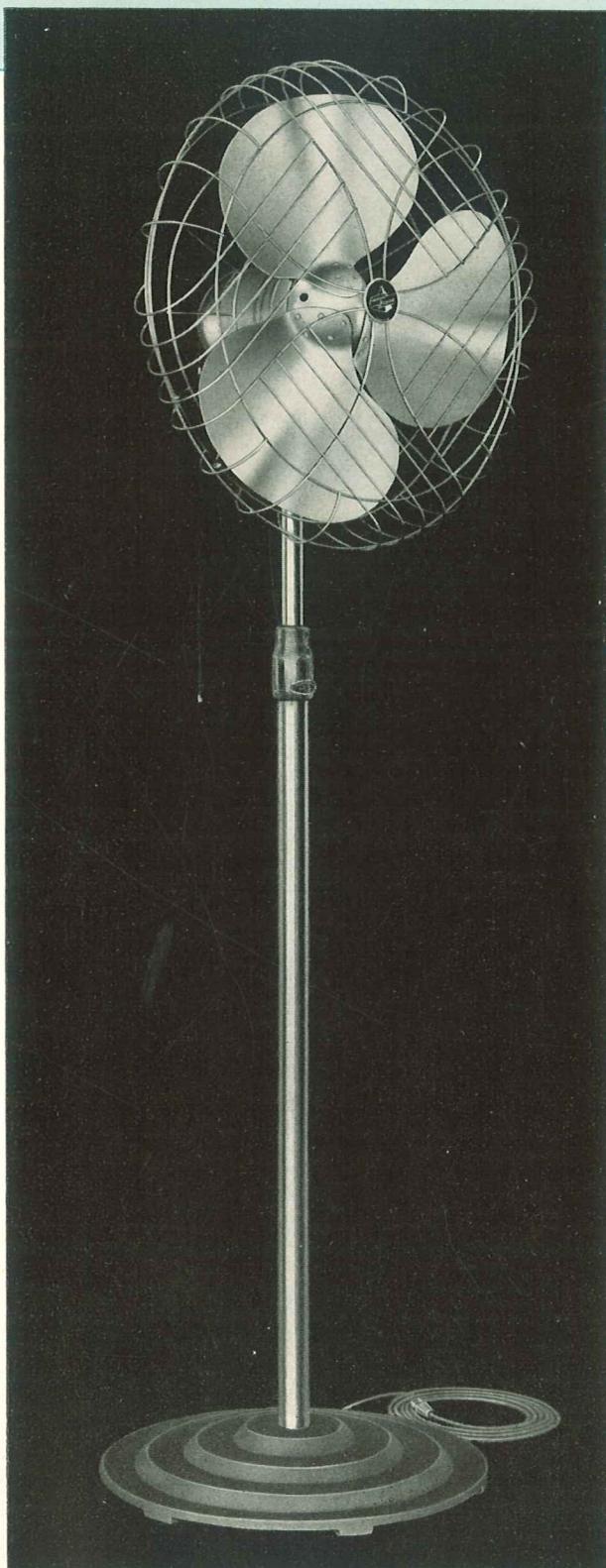
Fans will operate satisfactorily on voltage 10% above or below rated voltage.

Performance data subject to variations of 10% plus or minus. All data subject to change without notice.

Fans packed one in a box.

**EMERSON-ELECTRIC STANDARD 5-YEAR FACTORY-TO-USER GUARANTEE**

# Emerson-Electric Two-Speed Modern Current-Saving Capacitor M



Striking appearances—quiet—power-saving capacitor motors (on alternating current fans)—efficient type blades—just a few of the important specifications which will continue Emerson-Electric Air Circulators in the leadership for value and highest volume sales.

All models have two-speed operation and motors are furnished with a built-in receptacle for attaching plug, (plug and cord furnished with column accessories) eliminating the necessity of making wire connections. These fans have grease packed ball-bearings and may easily be relubricated without dismantling the motors.

## *Finer Quality—Greater Value in Every Detail*

|                                   |   |
|-----------------------------------|---|
| <b>MOTOR:</b>                     | A. C. Fans Capacitor-type, fully enclosed, streamlined design.  |
| <b>D. C. Fan</b>                  | Fully-enclosed motor, brush and commutator type—brushes readily renewable without dismantling motor.  |
|                                   | Male section of receptacle located in motor (for connecting female section furnished with accessories).   |
| <b>SHAFT:</b>                     | Solid-steel shaft $\frac{5}{8}$ " diameter.   |
| <b>BEARINGS:</b>                  | Ball bearings, grease packed.   |
| <b>LUBRICATION:</b>               | As shipped from the factory, fans will give several normal seasons of service before relubrication is necessary. (Approximately 6000 hours.)  |
| <b>SWITCH:</b>                    | Canopy pull switch in back cover of motor.  |
| <b>BLADES:</b>                    | All types, 3 blades, of formed, heavy-gauge aluminum—highly polished.   |
| <b>GUARD:</b>                     | Two-piece ornamental-design guard of heavy-gauge wire—spot welded.  |
| <b>ADJUSTMENT:</b>                | Can be tilted to any position from $8^\circ$ above horizontal to $25^\circ$ below horizontal in ceiling mounting or vice versa in column mounting. Insulated with rubber in mounting yoke.  |
| <b>FINISH:</b>                    | Front motor cover, motor field ring and mounting yoke attachment finished in aluminum lacquer. Back enclosing shell and blade cone polished chromium plate. Highly polished aluminum blades. Guard finished in Udylite.   |
| <b>MOUNTING ACCESSORIES</b>       |   |
| <b>CEILING-MOUNTING FITTINGS:</b> | Consist of motor socket finished in polished chromium round malleable flanged hanger with four lag screws and ceiling canopy finished in aluminum lacquer (no hanger pipe).   |
| <b>FLOOR-COLUMN MOUNTING:</b>     | Adjustable floor-column mounting permits placing the fan within the following range—minimum 4'11", maximum 8'4", from floor to center of fan. Base drilled for attachment to floor. Furnished with 20 feet of rubber-covered cord and plug, with female section of receptacle for attachment to male section in motor, installed in stand column. Base packed separately. Base finished in black wrinkle with seamless-steel tube finished in polished chromium. Coupling and motor socket finished in polished chromium. |
| <b>COUNTER-COLUMN MOUNTING:</b>   | Made in one size with center of fan 1'8" from the bottom of the base. Base drilled for attachment to counter. Furnished with 12 feet of rubber covered cord and plug, and female section of connector, for attachment to motor installed in stand column. Base, motor socket and column finished in polished chromium plate.  |
| <b>WALL-BRACKET MOUNTING:</b>     | Furnished complete with stud, motor socket and lag screws for attachment to wood construction. Extends 14" from wall and provides swivel adjustment to either side. Motor socket finished in polished chromium, bracket in aluminum lacquer.  |

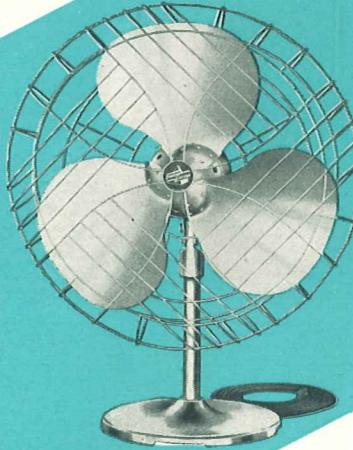
**EMERSON-ELECTRIC SELLS NO APPARATUS AT RETAIL**

# Only Styled Air Circulators with Quiet, Motors and 5-Year Guarantee

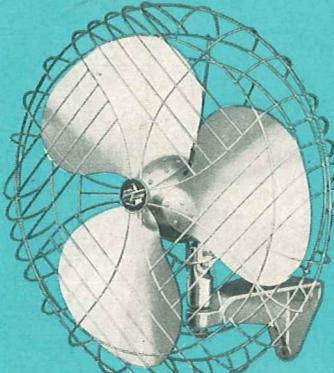
Emerson-Electric Air Circulators now carry the Emerson-Electric Standard 5-year Factory-to-User Guarantee.

This guarantee, in its 32nd year on Emerson-Electric portable and ceiling fans, has become a nationally known symbol for highest quality products. Now that it has been extended to include Air Circulators, fan buyers will receive this added pledge of value, without extra charge.

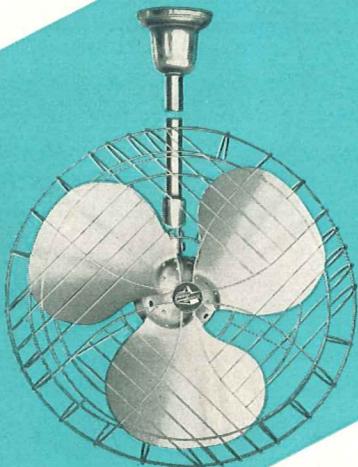
Counter-column mounted Emerson-Electric 24 inch Air Circulator. Base drilled for attachment to counter and equipped with protective felt.



Wall-Bracket mounted Emerson-Electric 24-inch Air Circulator. Complete with lag screws for attachment to wood construction.



Ceiling-mounted Emerson-Electric 24-inch Air Circulator. Complete with flange, 4 lag screws and ceiling canopy — no hanger pipe.



Whatever the requirements, the four types of Emerson-Electric mounting accessories will simplify the installation problem.

The floor column gives portability in addition to two simple adjustments, for directing the breeze as required. Fans mounted on counter columns are usually installed on top of counters, etc. Both of these accessories have rubber covered extension cords and rubber plugs.

Ceiling mounting and wall bracket accessories give additional means for permanent installations.

| SIZE  | VOLTS | CURRENT | SPEEDS | R. P. M. AND WATTS                        | *AIR DELIVERY C.F.M. | †AIR DELIVERY C.F.M. | WEIGHT NET | WEIGHT PKD. | TYPE NO. | CODE WORD |
|---|-------|---------|--------|---|----------------------|----------------------|------------|-------------|----------|-----------|
| 24"   | 115   | 60 cy.  | 2      | { 1150 rpm 190 watts<br>750 rpm 110 watts | 4800                 | 6100                 |            |             |          |           |
|   |       |         |        | { 1025 rpm 300 watts<br>550 rpm 120 watts | 3140                 | 4000                 | 37         | 52          | K60-SM   | KOCIN     |
| 30"   | 115   | 60 cy.  | 2      | { 1150 rpm 230 watts<br>750 rpm 130 watts | 6000                 | 8600                 |            |             |          |           |
|   |       |         |        | { 3220<br>4600                            | 41                   | 63                   |            |             | K60-SP   | KOFAN     |
| 24"   | 115   | D. C.   | 2      | { 1150 rpm 4800<br>750 rpm 3140           | 6100                 | 4000                 | 39         | 54          | D60-UD   | TAROS     |
|   |       |         |        | {   |                      |                      | 5          | 6           |          | KOCEM     |
|   |       |         |        |   |                      |                      | 60         | 65          |          | KOBEL     |
|   |       |         |        |   |                      |                      | 18         | 20          |          | KOCUR     |
|   |       |         |        |   |                      |                      | 15         | 17          |          | KODIP     |
| Ceiling-Mounting Fittings (no hanger pipe) .....                                      |       |         |        |   |                      |                      |            |             |          |           |
| Adjustable Floor-Column Mounting, Min. 4'11", Max. 8'4", floor to center of fan ..... |       |         |        |   |                      |                      |            |             |          |           |
| Counter-Column Mounting, 1'8", base to center of fan .....                            |       |         |        |   |                      |                      |            |             |          |           |
| Wall-Bracket Mounting, 1'2", extension from wall .....                                |       |         |        |   |                      |                      |            |             |          |           |

\*CFM—Cubic feet of air per minute, reading taken (Standard NEMA Test Method) one foot from fan.

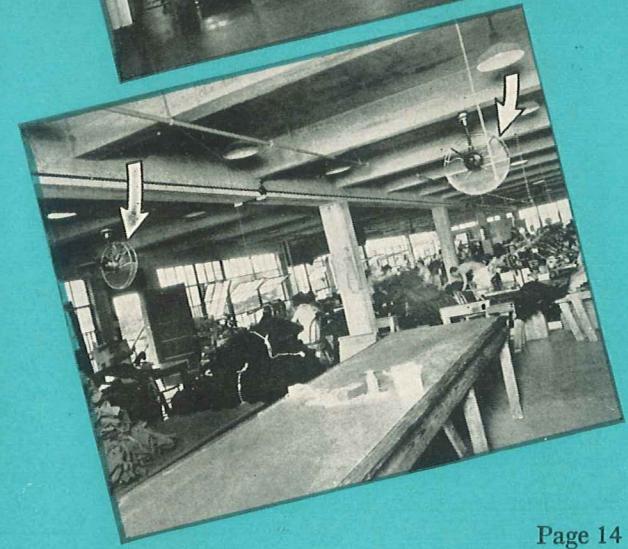
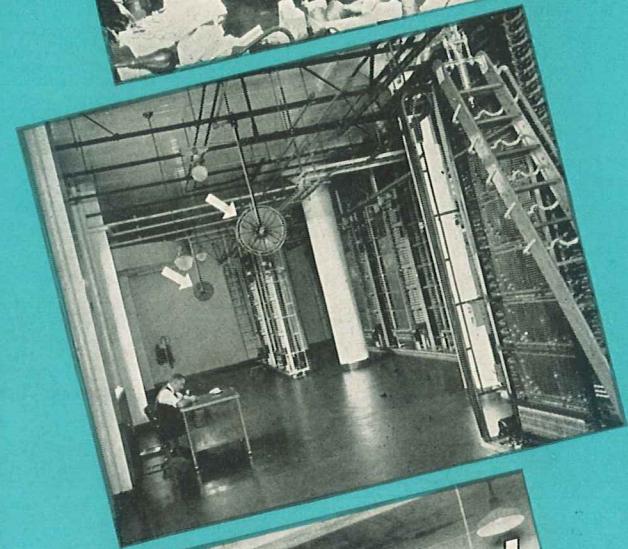
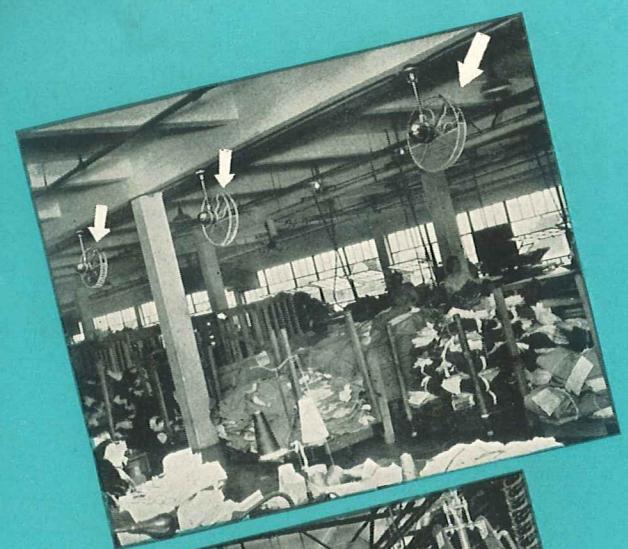
†CFM—Cubic feet of air per minute, reading taken (Standard NEMA Test Method) 4 feet from fan.

Performance data subject to variation of 10% plus or minus. All data subject to change without notice.

Motor packed in box—blades and guard in separate carton.

Regularly carried in stock at St. Louis, New York, Chicago and by conveniently located wholesalers.

EMERSON-ELECTRIC STANDARD 5-YEAR FACTORY-TO-USER GUARANTEE



# EMERSON-ELECTRIC

## ... Serve All Types of

## **Keep Workers Cool and Contented —Avoid Fatigue Loss**

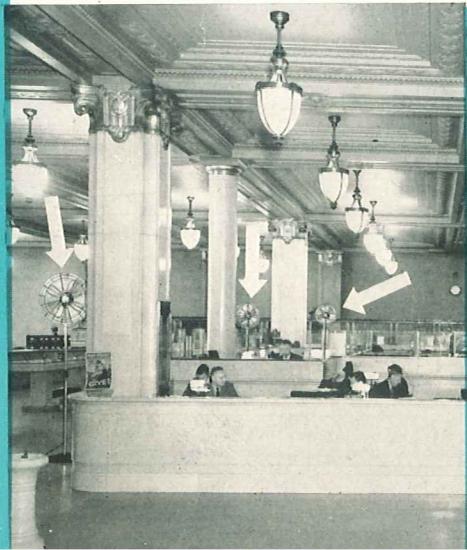
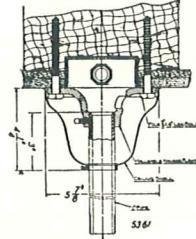
No matter what the condition — whether it is excessive heat, stagnant air, health-wrecking gases or nauseating odors — whether it is a general condition over a large area or a local difficulty — here's a way to whip the trouble, eliminate "fatigue loss" and increase production. Install Emerson-Electric high-velocity Air Circulators and correct the condition — workers become more congenial, contented, efficient.

## **Built for Heavy-Duty Service**

Emerson-Electric Air Circulators are favorites in factories, stores and offices the nation over. Rugged, ball-bearing motors, built for heavy duty service, give 6000 hours (3 seasons) of continuous service without re-lubrication; deliver great volumes of cooling, penetrating breezes long distances and do the job at low cost. Installations may be permanent for cooling and ventilating large areas, or portable to take care of localized conditions. Available in 2 sizes, each with adjustable floor-column, counter-column, ceiling and wall-bracket mounting accessories. All are fully guaranteed for five years.

## Ceiling Mounting Fittings

Detail drawing showing method of mounting the ceiling flange over outlet box and assembly of hanger pipe and ceiling canopy. Fittings furnished include flange, 4 lag screws and ceiling canopy—no hanger pipe.



# AIR CIRCULATORS

## Business and Industry

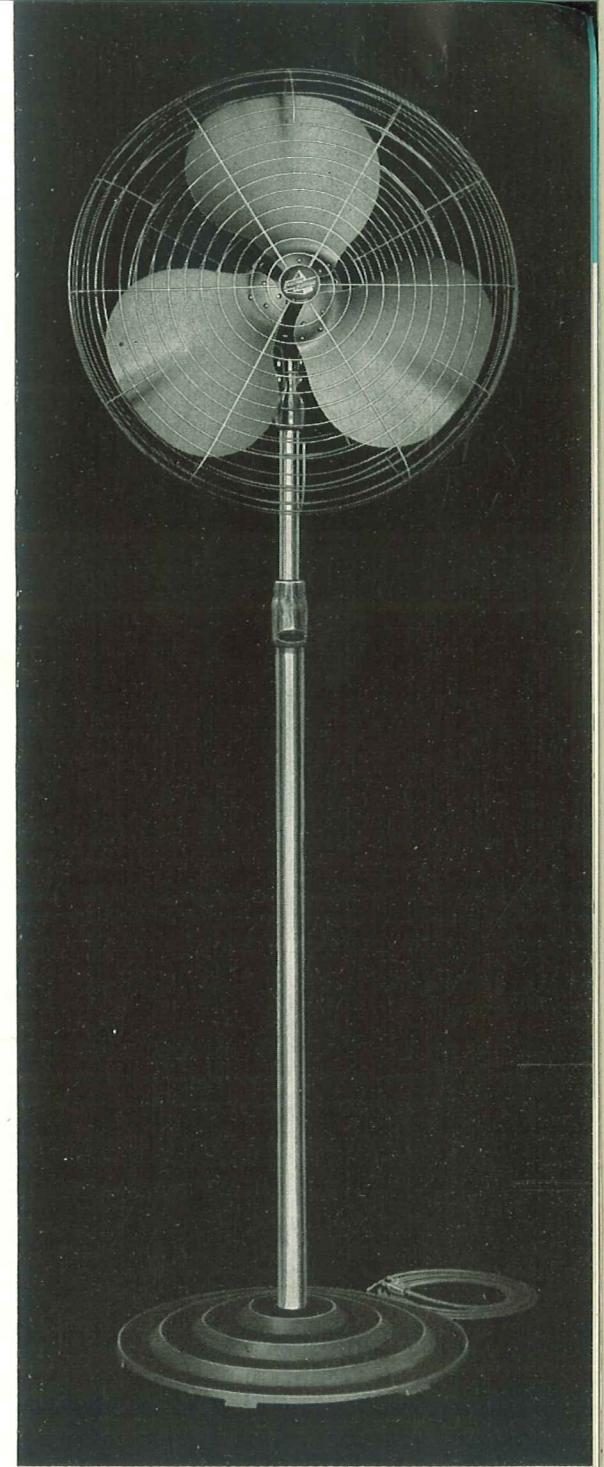
The American public is fully conscious of the necessity for proper ventilation and air circulation during the hot summer months. And every business man, whether he operates a store, shop, restaurant, hotel or factory, should realize the importance of making his establishment a comfortable place in which to work and do business.

Emerson-Electric Air Circulators provide the most economical cooling and ventilation for all types of business. Their ability to deliver large quantities of cooling, penetrating breezes — to give long hours of continuous trouble-free service — their quiet and low cost operation make them ideal for modern summer comfort. New uses for Emerson-Electric Air Circulators are being discovered right along — such as cooling closed frame and switch rooms in telephone buildings, air distribution in refrigeration rooms, preventing the entry of flies in food and dairy plants, in steel mills and other heavy industries.

### *Spiral, Safety Guard*

Industrial and commercial installations of Emerson-Electric Air Circulators often require close-spaced guards for additional protection. Fans with these guards are available in three types as listed. The guards are sturdily constructed in two-piece design, of heavy-gauge wire  $\frac{1}{2}$ -inch spacing and spot welded to the guard frame. The entire guard is attractively finished in Udylite to match the fan.

This new design guard is ornamental as well as serviceable, permitting its use in any place where, for safety reasons, it is preferable to the circulator with standard type guard.



Floor column mounting. See page 13 for illustrations of other mounting accessories.

| SIZE  | VOLTS | CURRENT | SPEEDS | R. P. M. AND WATTS                      | *AIR DELIVERY C.F.M. | †AIR DELIVERY C.F.M. | WEIGHT |      | TYPE NO. | CODE WORD |
|---|-------|---------|--------|---|----------------------|----------------------|--------|------|----------|-----------|
|   |       |         |        |   |                      |                      | NET    | PKD. |          |           |
| 24"   | 115   | 60 cy.  | 2      | 1150 rpm 190 watts<br>750 rpm 110 watts | 4100                 | 5200                 | 39     | 54   | K60-SM-4 | KOFIR     |
| 30"   | 115   | 60 cy.  | 2      | 1025 rpm 300 watts<br>550 rpm 120 watts | 5100                 | 7400                 | 43     | 65   | K60-SP-4 | KOFEP     |
| 24"   | 115   | D. C.   | 2      | 1150 rpm 230 watts<br>750 rpm 130 watts | 4100                 | 5200                 | 42     | 57   | D60-UD-4 | TOGIT     |
| Ceiling-Mounting Fittings (no hanger pipe) .....                                      |       |         |        |   |                      |                      | 5      | 6    | 300      | KOCEM     |
| Adjustable Floor-Column Mounting, Min. 4'11", Max. 8'4", floor to center of fan ..... |       |         |        |   |                      |                      | 60     | 65   | 100      | KOBEL     |
| Counter-Column Mounting, 1'8", base to center of fan .....                            |       |         |        |   |                      |                      | 18     | 20   | 200      | KOCUR     |
| Wall-Bracket Mounting, 1'2", extension from wall .....                                |       |         |        |   |                      |                      | 15     | 17   | 400      | KODIP     |

\*CFM—Cubic feet of air per minute, reading taken (Standard NEMA Test Method) one foot from fan, high speed.

†CFM—Cubic feet of air per minute, reading taken (Standard NEMA Test Method) 4 feet from fan, high speed.

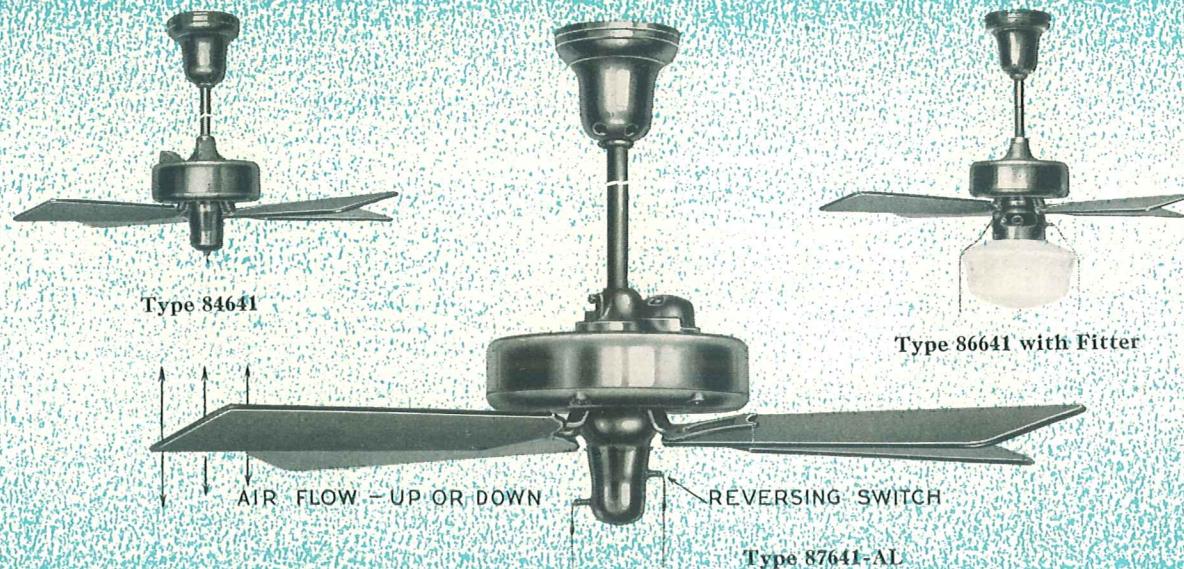
Performance data subject to variation of 10% plus or minus. All data subject to change without notice.

Motor packed in box — blades and guard in separate carton. Regularly carried in stock at St. Louis, New York and Chicago.

EMERSON



ELECTRIC



## Emerson-Electric 36-inch and 52-inch Ceiling Fans, Electrically Reversible and Non-Reversible Types

| SIZE  | STYLE    | VOLTS | CURRENT | SPEEDS AND WATTS  | *AIR DELIVERY | WEIGHT NET + PKD. | TYPE NO. | CODE WORD     |       |
|---|----------|-------|---------|---|---------------|-------------------|----------|---------------|-------|
| NON-REVERSIBLE TYPES—AIRFLOW DOWNWARD   |          |       |         |   |               |                   |          |               |       |
| 36"   | Standard | 115   | 60 cy.  | 330 rpm      235 rpm<br>78 watts      60 watts                              | 3630 CFM      | 28                | 34       | 84641         | SEGOP |
| 52"   | Standard | 115   | 60 cy.  | 222 rpm      188 rpm      162 rpm<br>116 watts      88 watts      75 watts  | 7000 CFM      | 58                | 63       | 85641-AL      | SARUP |
| ELECTRICALLY REVERSIBLE TYPES—AIR FLOW UP OR DOWN   |          |       |         |   |               |                   |          |               |       |
| 36"   | Standard | 115   | 60 cy.  | 340 rpm      260 rpm<br>72 watts      60 watts                              | 3800 CFM      | 33                | 39       | 86641         | SODUP |
| 52"   | Standard | 115   | 60 cy.  | 222 rpm      192 rpm      173 rpm<br>135 watts      106 watts      98 watts | 7000 CFM      | 58                | 64       | 87641-AL      | SAVEP |
| FITTERS FOR TYPES 84641, 86641, 85641-AL AND 87641-AL   |          |       |         |   |               |                   |          |               |       |
| 4-inch Fitter for Unit Glassware with light socket and pull switch for light for Types 84641 and 86641.....       |          |       |         |   |               |                   | 2½       | Part No. 8245 |       |
| 6-inch Fitter for Unit Glassware with light socket and pull switch for light for Types 85641-AL and 87641-AL..... |          |       |         |   |               |                   | 3½       | Part No. 8246 |       |
|   |          |       |         |   |               |                   |          | SKOFH         |       |
|   |          |       |         |   |               |                   |          | SKOMP         |       |

\*CFM—Cubic feet of air per minute—high speed.

Regularly carried in stock at St. Louis, New York, Chicago and by conveniently located wholesalers.

Performance data subject to variation of 10% plus or minus. All data subject to change without notice.

Packed one motor and fittings in carton. Blades with flanges and ceiling canopy in separate carton.

EMERSON-ELECTRIC [STANDARD] 5-YEAR FACTORY-TO-USER GUARANTEE

EMERSON ELECTRIC

## 36 and 52in. Ceiling Fans Reversible and Non- Reversible Types.

### There Is No Question About Performance or Operating Economy When Emerson-Electric Ceiling Fans Are Installed.

Year after year, since first introduced in the early nineties, their perfection of design has progressed steadily. Setting the standard for appearance, breeze power and serviceability, early became a tradition with Emerson-Electric designers and has never been relinquished.

The fine engineering details are well known to Architects and Engineers. From the Southern States, where Ceiling Fans are given the longest and most severe service tests, come reports of twenty to thirty-five years of dependable, efficient usage.

Therefore, it is practically impossible to predetermine the life of present-day fans. This is based on the experience of the past and the multitude of refinements introduced into their design since the early models were marketed.

Select from the complete range of types to best suit individual requirements. Electrically Reversible and Non-reversible Models. Fans may be converted at any time for use with lighting units without costly dismantling or rewiring of the fan.

### Finer Quality - Greater Value in Every Detail



**MOTOR:** Induction type—slow speed—quiet.

**SHAFT:** Hollow-steel shaft, 36-inch types,  $\frac{5}{8}$ -inch diameter; 52-inch types,  $\frac{7}{8}$ -inch diameter.

**BEARINGS:** Ball bearings with hardened-steel, grooved races—ground and polished to fit the balls, submerged and run in oil bath.

**LUBRICATION:** Continuous circulation system of lubrication by spiral oil grooves in the armature core with oil drain plug in oil cup which permits changing oil and flushing out oil reservoir without removing fan from ceiling.

**SWITCHES:** Type 84641 has 2-speed pull switch in switch cover. Type 86641 has 2-speed pull switch and reversing pull switch in switch cover. Type 85641-AL has 3-speed pull switch in switch cover. Type 87641-AL has 3-speed pull switch and reversing pull switch in switch cover.

**BLADES:** Seasoned Basswood—each set balanced; 36-inch fans, thirteen-degree dip; 52-inch fans, fifteen-degree dip.

**FINISH:** Mahogany-lacquer finish over motor and trimmings—blades in hand-rubbed mahogany finish to match.

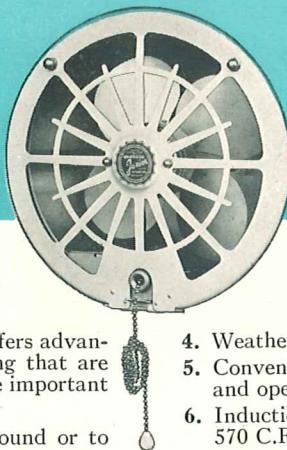
**FITTINGS:** Standard equipment includes ceiling canopy, ceiling hook, and insulating hanger eye; 36-inch types tapped for  $\frac{1}{2}$ " hanger pipe; 52-inch types tapped for  $\frac{3}{4}$ " hanger pipe. Hook with adapter to fit  $\frac{1}{2}$ " or  $\frac{3}{8}$ " fixture stud furnished without extra charge. (No hanger pipe furnished.)

**WIRES:** Upper ends of light and motor wires extend 36" from top of motor canopy—usually sufficient to reach outlet box in ceiling without splicing. All types are wired for lights at the factory with ends of light wires looped in switch cover for convenience in connecting to light socket at any time it might be decided to equip fans with lighting fixtures.

EMERSON-ELECTRIC SELLS NO APPARATUS AT RETAIL

# EMERSON

# Junior Built-in

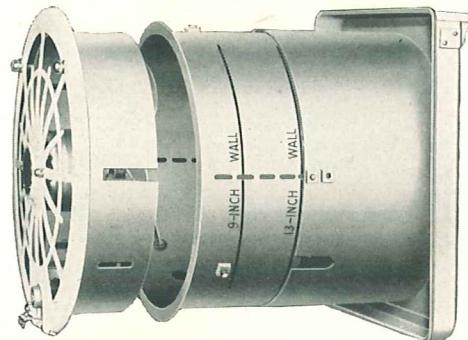


Here is a kitchen wall-box ventilator that offers advantages in installation, operation and servicing that are unique in this type of equipment. Note these important features.

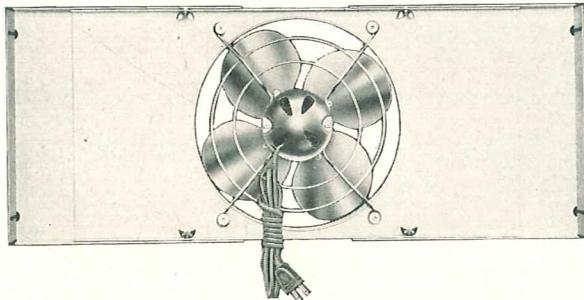
1. Square outside frame. Easy to brick around or to frame for wood construction.
2. Round telescoping sleeve. Simple to adjust for walls  $5\frac{1}{4}$ " to 13" thick.
3. Inside grille and fan in one unit. Installed after walls are plastered.

4. Weather-tight outer door—double-rabbet seal.
5. Convenient chain operation. Release actuates switch and opens outer door.
6. Induction motor—10-inch, quiet-type blade—moves 570 C.F.M. in free air.
7. Easily serviced. Fan attached to grille with hinge, swinging down.
8. Grille finished in baked White Enamel. May be repainted to match walls. Fan and all other parts finished in aluminum lacquer.

This view shows the grille and fan section separated from the inner and outer sleeves with outer door section. These two sections are packed separately. The wall section is usually delivered when the wall is being erected and the fan section after the plastering has been completed.

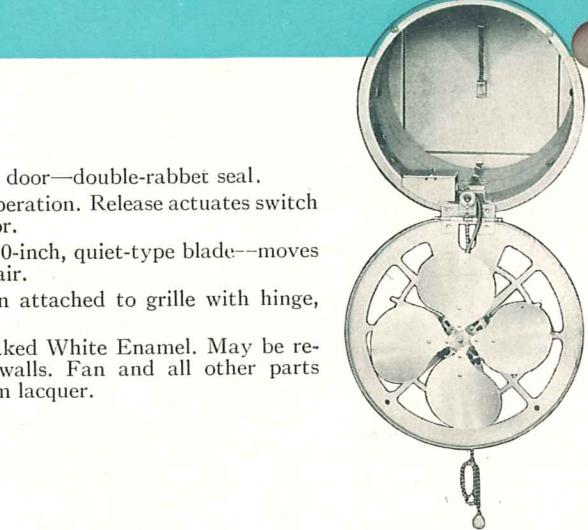


EMERSON Junior 10 and 12-inch Ventilating Fans with Mounting Panels

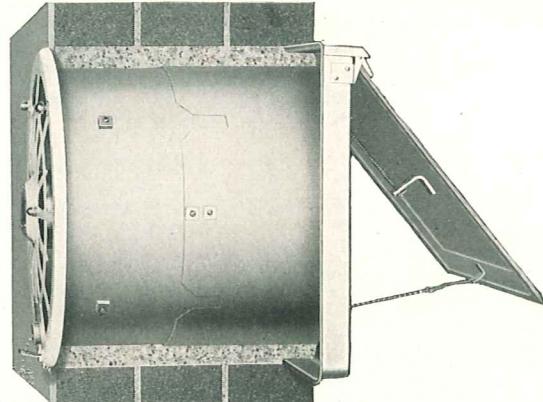


Mounting panels provide an inexpensive, yet effective method of securing proper ventilation in kitchens, bedrooms, lavatories, and other places of similar size. A screwdriver is the only tool required to install the panel. It may be located in either the top or bottom portion of a window without interfering with the raising or lowering of the sash, also convenient for transom installation.

Panels are finished in baked Ivory Enamel. Motor and blades finished in baked Antique Statuary Bronze Enamel, mounting support finished in Udylite.



At top of page in center, the fan is shown installed ready for operation. At right, the fan and grilles hinged down for inspection, cleaning and oiling of the motor. It is not necessary to break any electrical connections to perform this work. Merely remove the two thumb-nuts at the top of the grille and the fan which is mounted on the grille swings down on the hinge.



This view shows a section through a 13-inch brick wall, the maximum expansion, with the outer door open, as it is when the fan is in operation. The double-rabbet seal on the outer frame makes a weather-tight door when fan is idle. Note the overhanging apron above the door hinge to prevent the elements, particularly in winter, from interfering with its operation. Where fan is installed in walls thicker than 13-inch, or where the sleeves extend through kitchen cabinets, an extension sleeve can easily be fabricated of 20-gauge galvanized iron and bolted to the standard wall-box sleeves.

| SIZE<br>BLADES   | VOLTS | CYCLES | PERFORMANCE       | *C. F. M.<br>FREE AIR | ADJUSTABLE<br>DIMENSIONS       | WEIGHT, LBS.<br>NET | WEIGHT, LBS.<br>PKD. | TYPE<br>NO. | CODE<br>WORD |
|--|-------|--------|-------------------|-----------------------|--------------------------------|---------------------|----------------------|-------------|--------------|
| <b>EMERSON JUNIOR VENTILATORS WITH METAL MOUNTING PANELS</b> |       |        |                   |                       |                                |                     |                      |             |              |
| 10"  | 115   | 60     | 1500 rpm—37 watts | 570                   | 23" to 34" Wide                | 10                  | 13                   | 3550        | JEXAB        |
| 12"  | 115   | 60     | 1575 rpm—46 watts | 875                   | 27" to 39" Wide                | 18                  | †25                  | 3560        | JEXOF        |
| <b>†EMERSON JUNIOR VENTILATOR WITH WALL BOX</b>              |       |        |                   |                       |                                |                     |                      |             |              |
| 10"  | 115   | 60     | 1500 rpm—37 watt  | 570                   | 5 $\frac{1}{4}$ " to 13" Walls | 16                  | †21                  | 3550-AA     | JOHEN        |

\*C.F.M.—Cubic feet of air per minute—free air.

Regularly carried in stock at St. Louis, New York, Chicago, and by conveniently located wholesalers.

Fans will operate satisfactorily on voltage 10 per cent above or below rated voltage

... Satisfactory for operation on 115 volts, 50 cycles—speed and air delivery

approximately 15 per cent lower.

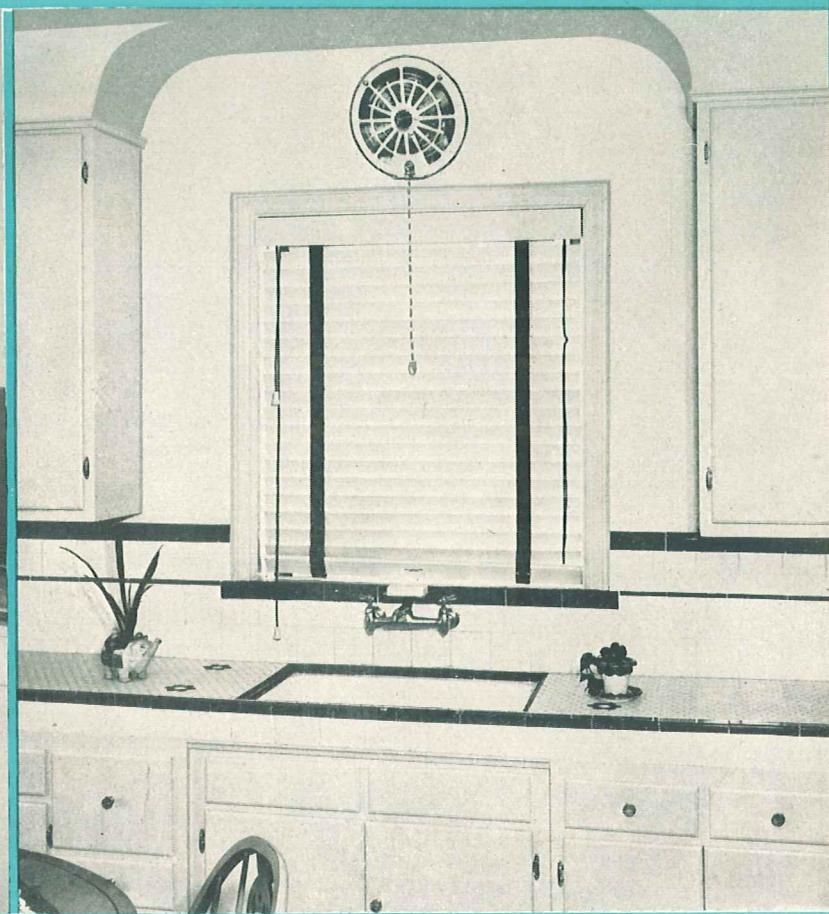
†These Fans packed separately from window panels.

†Inner and outer sleeve packed in one package, inside grille and fan in separate package.

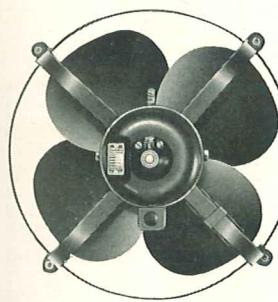
All data subject to change without notice.

EMERSON-ELECTRIC STANDARD ONE-YEAR FACTORY-TO-USER GUARANTEE

# KITCHEN VENTILATING FANS



## Emerson-Electric Ventilating Fans 12-inch and 16-inch Types

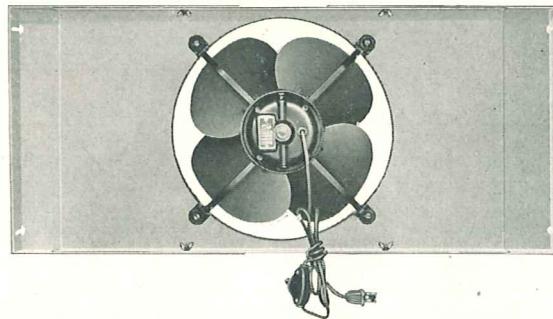


New Ventilator Type 92648, 16-inch fan is designed for exhaust duty and is suitable for small restaurant kitchens, shops, lavatories, etc.

These two new fans are slow-speed, quiet-operating types with all the newest features for long life and trouble-free service.

The 16-inch fan has an outlet box attached for connection of conduit. This fan can be mounted on suitable panel board. Automatic outside shutters (illustrated on Page 21) should be used where fan exhausts directly outdoors.

The 12-inch fan may be used in a similar manner, or with the adjustable mounting panel. It is equipped with extension cord and switch.



New Ventilator Type 92646, 12-inch fan with extension cord and switch. Two sizes of adjustable mounting panels are available for use with fan for installation in windows or transoms.

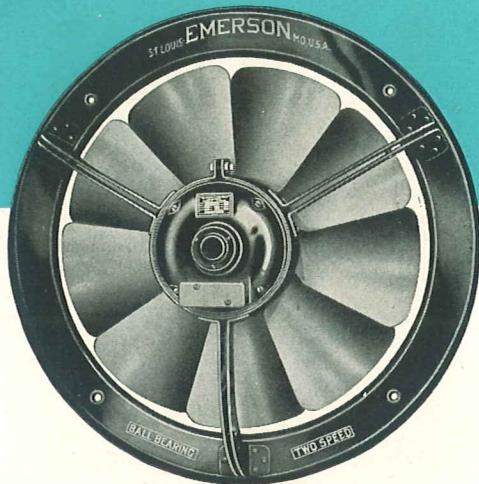
| TYPE NUMBER                                  | SIZE BLADES | PERFORMANCE            | *C. F. M.<br>FREE AIR | WEIGHT |       | CODE WORD |
|--|-------------|------------------------|-----------------------|--------|-------|-----------|
|  |             |                        |                       | NET    | PKD.  |           |
| FANS ONLY FOR 115 VOLTS, 60 CYCLES           |             |                        |                       |        |       |           |
| 92646  | 12"         | 1375 rpm—53 watts..... | 900                   | 16     | 27    | SADAX     |
| 92648  | 16"         | 1030 rpm—66 watts..... | 1650                  | 20     | 28    | SBOKY     |
| ADJUSTABLE MOUNTING PANELS FOR 12-INCH FAN   |             |                        |                       |        |       |           |
| All Metal, Adjustable for Windows 27" to 39" |             |                        |                       | 13     | JEVAY |           |
| All Metal, Adjustable for Windows 36" to 48" |             |                        |                       | 18     | JERAV |           |

All data subject to change without notice. \*C.F.M.—Cubic feet of air per minute—free air.

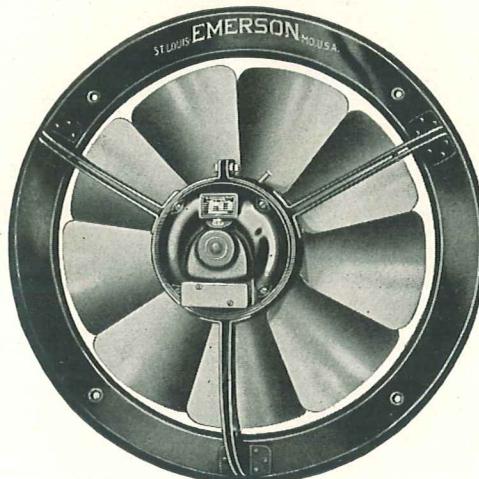
EMERSON-ELECTRIC STANDARD ONE-YEAR FACTORY-TO-USER GUARANTEE

# Emerson-Electric Exhaust Fans

## Five Sizes — AC and DC Models Direct Drive Ball-bearing and Sleeve-bearing



Two-Speed Ball-Bearing Exhaust Fan



Single-Speed Sleeve-Bearing Exhaust Fan

For ventilating and exhaust problems, where large volumes of air are to be moved, Emerson-Electric Exhaust Fans operate quietly and efficiently. These fans, with blades 12 to 30 inches in diameter, are very conservatively rated and will prove highly satisfactory for installations requiring exhaust fans of these sizes. Emerson-Electric Exhaust Fans, due to their quietness, are suitable for installation in homes, smart shops, offices, restaurants and other commercial and industrial locations where blade noise would be objectionable. For more than thirty years Emerson-Electric Exhaust Fans have provided dependable ventilation for every type of ventilating need. Thousands of satisfied users testify to the efficiency of operation and satisfaction obtained from Emerson-Electric Exhaust Fans.

### FULLY ENCLOSED MOTORS

Motors are fully enclosed, protecting the working parts from moisture, dust, grit, grease and fumes. The constant stream of air passing over the motor while it is in operation prevents it from overheating. Each Emerson-Electric Exhaust Fan is individually tested before packing and fully guaranteed for one year against all mechanical and electrical defects.

### OVERLAPPING-BLADE ASSEMBLY UNUSUALLY QUIET IN OPERATION

Designed by Emerson-Electric Engineers after exhaustive tests of all types of blades, the Emerson-Electric Exhaust Fan Blade meets the full requirements of quiet operation and large-volume air delivery. Each fan blade assembly has nine overlapping

blades, each of which is matched for weight before assembly and each complete assembly is carefully balanced. The blades are mounted on a large center disk, the latter serving to prevent the flow of reverse air currents near the center of the fan blade assembly. The durable, dark-green finish on the blades may be easily cleaned and will withstand the elements for many years of service.

Sleeve-bearing, single-speed fans are made for horizontal discharge only. Ball-bearing, two-speed fans may be installed to discharge horizontally, vertically, or at any angle.

All types have powerful, fully enclosed, self-cooling motors and may be operated continuously with entire satisfaction.

### Write for Complete Catalog on Exhaust Fan Equipment

#### PRICES AND DATA—EXHAUST FANS—PERFORMANCE UNDER FREE-AIR DELIVERY CONDITIONS

| SIZE<br>FAN  | H.P. | HIGH SPEED |       |        |        | LOW SPEED |                   |   |        | WEIGHT<br>NET | TYPE<br>NO. | CODE<br>WORD |     |       |       |  |
|--|------|------------|-------|--------|--------|-----------|-------------------|---|--------|---------------|-------------|--------------|-----|-------|-------|--|
|  |      | WATTS      | AMPS. | R.P.M. | C.F.M. | WATTS     | AMPS.             | R.P.M.  | C.F.M. |               |             |              |     |       |       |  |
| Two-Speed, Ball-Bearing Exhaust Fans                           |      |            |       |        |        |           |                   |   |        |               |             |              |     |       |       |  |
| FOR 115 VOLTS, 60 CYCLES, SINGLE PHASE—ALSO MADE FOR 220 VOLTS |      |            |       |        |        |           |                   |   |        |               |             |              |     |       |       |  |
| 12"  | 1/50 | 70         | 1.1   | 1140   | 850    | 51,000    | 60                | .80   | 860    | 725           | 43,500      | 21           | 28  | S40SM | LAFIH |  |
| 16"  | 1/20 | 135        | 2.5   | 1140   | 1500   | 90,000    | 110               | 1.9   | 860    | 1125          | 67,500      | 47           | 59  | S50SG | LECEP |  |
| 18"  | 1/8  | 165        | 3.3   | 1140   | 2350   | 141,000   | 105               | 2.0   | 860    | 1750          | 105,000     | 55           | 71  | S60ST | LEDOT |  |
| 24"  | 1/6  | 280        | 5.6   | 860    | 4000   | 240,000   | 200               | 4.3   | 570    | 2700          | 162,000     | 112          | 149 | S70SG | LEFAR |  |
| 30"  | 1/3  | 430        | 8.2   | 685    | 6700   | 402,000   | 355               | 8.0   | 570    | 5600          | 336,000     | 218          | 272 | S95SD | LEFOV |  |
| FOR 220 VOLTS, 60 CYCLES, THREE PHASE                          |      |            |       |        |        |           |                   |   |        |               |             |              |     |       |       |  |
| 18"  | 1/8  | 175        | 1.0   | 1140   | 2350   | 141,000   | 141,000           | Variable speed operation obtained by use of 3-speed control units.  | 55     | 70            | P60SF       | LEGET        |     |       |       |  |
| 24"  | 1/6  | 230        | 1.6   | 860    | 4000   | 240,000   | 240,000           | Variable speed operation obtained by use of 3-speed control units.  | 112    | 150           | P70SC       | LEHUY        |     |       |       |  |
| 30"  | 1/3  | 355        | 2.5   | 685    | 6700   | 402,000   | 402,000           | Variable speed operation obtained by use of 3-speed control units.  | 218    | 263           | P95SF       | LIBOC        |     |       |       |  |
| FOR 115 VOLTS DIRECT CURRENT (SERIES WINDING)                  |      |            |       |        |        |           |                   |   |        |               |             |              |     |       |       |  |
| 12"  | 1/30 | 40         | .35   | 1140   | 850    | 51,000    | 51,000            | Variable speed operation obtained by use of speed regulator in series with motor— 50% reduction obtained. | 18     | 23            | D47SI       | IGJOB        |     |       |       |  |
| 16"  | 1/20 | 80         | .70   | 1140   | 1500   | 90,000    | 90,000            | Variable speed operation obtained by use of speed regulator in series with motor— 50% reduction obtained. | 43     | 53            | D59SD       | IGDAS        |     |       |       |  |
| 18"  | 1/8  | 127        | 1.1   | 1140   | 2350   | 141,000   | 141,000           | Variable speed operation obtained by use of speed regulator in series with motor— 50% reduction obtained. | 52     | 67            | D68SF       | IGDOW        |     |       |       |  |
| 24"  | 1/6  | 242        | 2.1   | 860    | 4000   | 240,000   | 240,000           | Variable speed operation obtained by use of speed regulator in series with motor— 50% reduction obtained. | 110    | 147           | D88SD       | IGMEC        |     |       |       |  |
| 30"  | 1/3  | 392        | 3.4   | 685    | 6700   | 402,000   | 402,000           | Variable speed operation obtained by use of speed regulator in series with motor— 50% reduction obtained. | 215    | 260           | D11SE       | IGLEB        |     |       |       |  |
| Single-Speed, Sleeve-Bearing Exhaust Fans                      |      |            |       |        |        |           |                   |   |        |               |             |              |     |       |       |  |
| FOR 115 VOLTS, 60 CYCLES, SINGLE PHASE                         |      |            |       |        |        |           |                   |   |        |               |             |              |     |       |       |  |
| 12"  | 1/50 | 52         | 1.1   | 1140   | 850    | 51,000    | Single Speed..... | 18  | 28     | S40SY         | BABOZ       |              |     |       |       |  |
| 16"  | 1/20 | 77         | 1.4   | 1140   | 1500   | 90,000    | Single Speed..... | 34  | 58     | S50SQ         | BACOB       |              |     |       |       |  |
| 18"  | 1/8  | 170        | 3.2   | 1140   | 2350   | 141,000   | Single Speed..... | 43  | 71     | S60WJ         | BADIB       |              |     |       |       |  |
| 24"  | 1/6  | 250        | 5.6   | 860    | 4000   | 240,000   | Single Speed..... | 89  | 155    | S70SH         | BAFEB       |              |     |       |       |  |
| 30"  | 1/3  | 385        | 7.6   | 685    | 6700   | 402,000   | Single Speed..... | 167   | 260    | S95SE         | BAHED       |              |     |       |       |  |

Single-phase and three-phase, 60-cycle fans, also 115 volt direct current, are regularly carried in stock at St. Louis, New York City and Chicago and by conveniently located wholesalers.

All data subject to change without notice.

C.F.M.—Cubic feet of air per minute. C.F.H.—Cubic feet of air per hour.

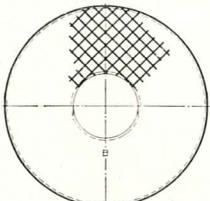
Speed regulators not required or regularly furnished with three-phase or direct-current fans. Two-speed single-phase fans furnished with 2-speed snap switch.

EMERSON-ELECTRIC STANDARD ONE-YEAR FACTORY-TO-USER GUARANTEE

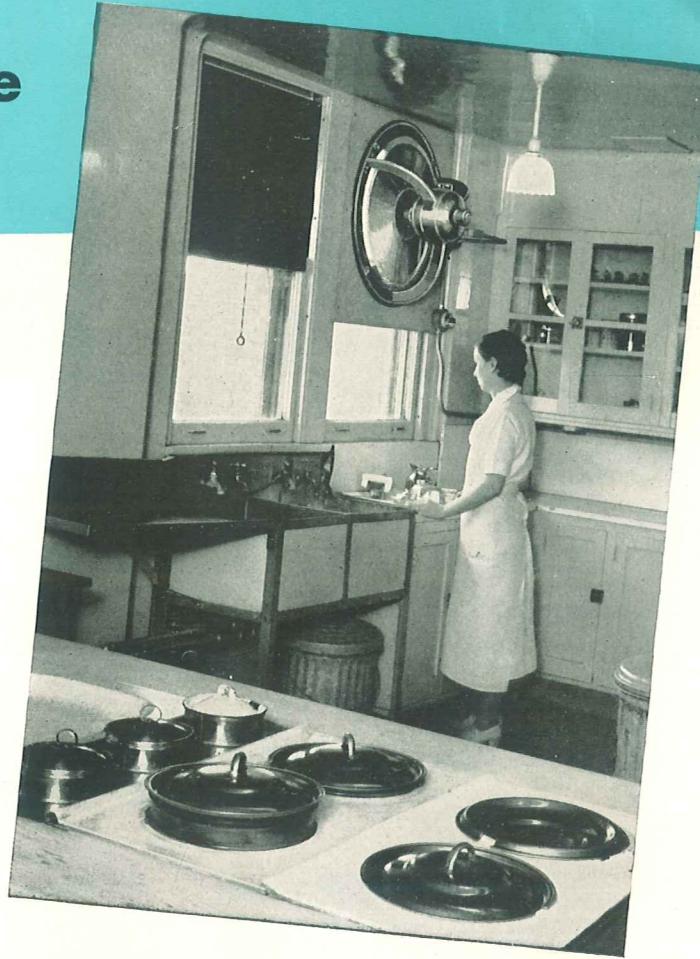
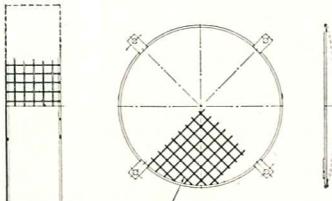
# Where, and for what Purpose are Exhaust Fans Installed?

| WHERE INSTALLED   | USED TO EXHAUST  |
|---|--|
| <b>AGRICULTURAL:</b><br>Dairy Barns.....<br>Dairy Bottling Rooms.....   | Odors, Fumes.<br>Stagnant Air, Steam, Odors.   |
| <b>APARTMENT:</b><br>Engine Rooms.....<br>Kitchens.....<br>Large Halls.....   | Excessive Heat.<br>Heat, Steam, Odors.<br>Stagnant Air.  |
| <b>BAKERIES:</b><br>Baking Rooms and Sales Room.....  | Excessive Heat.  |
| <b>CHEMICAL PLANTS:</b><br>Compounding Rooms.....   | Fumes, Steam, Excessive Heat.  |
| <b>COMMERCIAL LAUNDRIES:</b><br>Washing and Ironing Rooms.....<br>Drying Rooms.....   | Excessive Heat, Steam, Moisture.<br>Distributing Warm Air for Quick Drying.                    |
| <b>EATING PLACES:</b><br>Cafes, Restaurants, Taverns,<br>Cafeterias:<br>Dining Rooms.....<br>Kitchens—over steam tables.....<br>Tap Rooms.....                            | Excessive Heat, Steam, Smoke, Cooking Odors.   |
| <b>ENGRAVING, PRINTING AND<br/>NEWSPAPER PLANTS:</b><br>Etching and Electroplating Rooms  | Injurious Fumes.   |
| <b>GARAGES—SERVICE STATIONS:</b><br>Work and Test Rooms.....  | Dangerous and Injurious Fumes (Carbon Monoxide).   |
| <b>HOMES:</b><br>Attic Installation.....  | Summer Heat.   |
| <b>HOSPITALS:</b><br>Kitchens.....<br>Large Halls.....<br>Laundries.....<br>Sterilizing Rooms.....  | Steam, Odors, Heat.<br>Stagnant Air.<br>Steam, Excessive Heat.<br>Steam, Odors.                |
| <b>HOTELS:</b><br>Assembly Rooms—Display Rooms.....<br>Kitchens—Dining Rooms.....<br>Tap Rooms and Shops.....<br>Lavatories—Engine Rooms.....<br>Laundry—Large Halls..... | Heat, Steam, Smoke, Odors, Stagnant Air.   |
| <b>INDUSTRIAL:</b><br>Factories—General:<br>Battery Rooms.....<br>Engine Rooms.....<br>Heat Treating Rooms.....<br>Lavatories.....<br>Work Rooms.....                     | Poisonous Fumes.<br>Excessive Heat and Steam.<br>Excessive Heat.<br>Bad Air.<br>Dust and Heat. |
| <b>LODGE AND CLUB BUILDINGS:</b><br>Assembly Rooms—Card Rooms.....<br>Kitchens—Lavatories—Game Rooms—<br>Gymnasiums.....  | Heat, Steam, Smoke, Odors, Stagnant Air.   |
| <b>MEAT PACKING PLANTS:</b><br>Slaughter and Packing Rooms.....   | Heat, Steam and Odors.   |
| <b>OFFICES.....</b>   | Stagnant Air, Smoke.   |
| <b>RECREATIONAL PLACES:</b><br>Assembly Rooms.....<br>Bowling Alleys, Pool Rooms, Dance Halls, Game Rooms—Lavatories  | Smoke, Stagnant Air, Odors.  |
| <b>SCHOOLS:</b><br>Class Rooms—Assembly Rooms.....<br>Gymnasiums—Lunch Rooms—<br>Lavatories.....  | Stagnant Air, also to Control Circulation of Heat.   |
| <b>THEATRES:</b><br>Assembly Rooms.....<br>Lavatories.....<br>Projector Rooms.....  | Heat, Odors, Stagnant Air.   |

Guard for Motor Side



Guard for Discharge Side



In places where odors, steam, smoke or excessive heat are present, the exhaust fan should be placed near the ceiling. In kitchens, the fan should be placed directly above or near the stove and as close to the ceiling as possible. This will prevent the circulation of smoke, steam and odors to other parts of the room and to other rooms of the building. Install exhaust fans directly in the outside wall or upper part of a window.

In garages, chemical plants, and similar locations where escaping gases or fumes are heavier than air, and tend to fall toward the floor, the exhaust fan should be located as near to the floor as possible. For such installations, safety requires the use of wire mesh guards to prevent injury from accidental contact with the blades of the fan.

## AUTOMATIC SHUTTERS AND PROTECTIVE GUARDS

To automatically close the opening when exhaust fan is located on an outside wall and not in operation, this automatic shutter will be found very satisfactory.

The louvers are made of aluminum and each shutter is individually hung on corrosion-proof brass pins to assure continuous service without attention.

Close-woven wire mesh guards are available for both motor and discharge sides of fan.

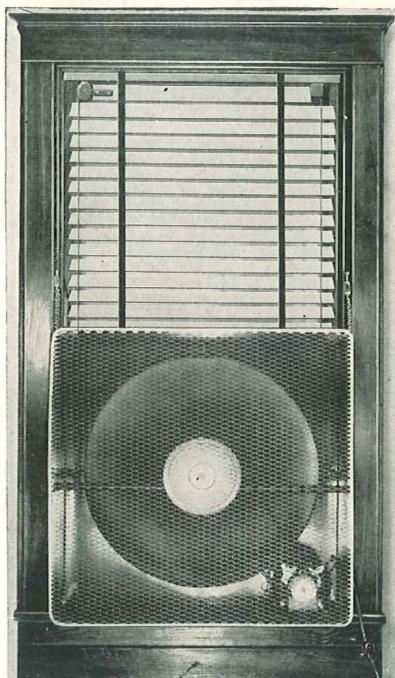


| WIRE MESH GUARDS   |                         | AUTOMATIC SHUTTERS             |                    |             |
|--------------------|-------------------------|--------------------------------|--------------------|-------------|
| FOR<br>FAN<br>SIZE | MOTOR SIDE<br>CODE WORD | DISCHARGE<br>SIDE<br>CODE WORD | FOR<br>FAN<br>SIZE | WT.<br>PKD. |
| 12"                | JOMAS                   | JOGAL                          | 12"                | 6           |
| 16"                | JOMET                   | JOGEM                          | 16"                | 10          |
| 18"                | JOMIV                   | JOGIN                          | 18"                | 12          |
| 24"                | JOMOW                   | JOGUR                          | 24"                | 16          |
| 30"                | JOMUX                   | JOGOP                          | 30"                | 22          |

# Quiet-Type EMERSON- 24", 36", 42"



Illustration of 36", 42" and 48" types



Inside View  
Fan installed in window

In keeping with the Emerson-Electric tradition of building quality products, this line of fans has many important features of design, quietness and economical, dependable performance, which contribute to longer trouble-free service.

With a selection of four sizes, providing air handling capacities ranging from 5,000 to 16,700 C.F.M., the correct fan or fans for any given requirement may readily be chosen.

## Popular 24-inch Fan in Walnut Finish

This all-purpose Cooler Fan may be installed in the attic with a plenum chamber, mounted on the wall for exhaust service or installed in a window.

The intake side of the fan is covered with an expanded metal grille, finished in Udylite, and the 7-foot extension cord has an "off-on" through switch installed in the cord.

**SPECIFICATIONS: 24-INCH FAN**  
**FRAME:** Steel, welded construction, firmly braced.  
**MOTOR:** Split-phase, resilient (rubber) hub-mounted. Over-size sleeve bearings grooved to distribute the oil evenly. Slotted base for adjustment of belt tension.  
**FAN BLADE ASSEMBLY:** Four blades, perfectly balanced. Steel shaft operates on two, sleeve-bearing pillow blocks.  
**BELT:** V-type, sure-traction, non-stretching.  
**FINISH:** Housing and blades finished in Matescent Walnut Enamel and Udylite finish on the moulding and expanded metal grille. Motor finished in black enamel.



**ACCESSORIES FURNISHED:** Four rubber feet furnished for insulating fan housing from floor. Light chains and turn buckles for window installation.

**GUARANTEE:** Emerson-Electric Standard One-Year Factory-to-User Guarantee.

| Size<br>Fan | Type No. | Speeds | *R.P.M. |     | H.P. | Single-Phase |        | Watts | #C.F.M.<br>Free Air | Weight |      | Code Word |
|-------------|----------|--------|---------|-----|------|--------------|--------|-------|---------------------|--------|------|-----------|
|             |          |        | Motor   | Fan |      | Volts        | Cycles |       |                     | Net    | Pkd. |           |
| 24"         | S60-SAN  | 1      | 1725    | 550 | 1/6  | 115          | 60     | 265   | 5,000               | 80     | 92   | TUNEH     |

\*C.F.M.—Cubic feet of air per minute. *Above values* derived in tests made in accordance with the provisions of the Standard Code for Centrifugal and Axial Flow Fans, as established by The American Society of Heating and Vent-

ilating Engineers, and the National Association of Fan Manufacturers.

\*R.P.M.—Revolutions per minute.

All data subject to change without notice.

# ELECTRIC Cooler Fans and 48" Types

## CAPACITOR MOTORS CUT OPERATION COST

Emerson-Electric 36", 42" and 48" Cooler Fans are powered with specially engineered, resilient rubber, hub-mounted capacitor-start, induction-run motors. They start the fan without stress or strain, and come up to speed quickly.

The motors have built-in thermal-overload protectors. This protector automatically prevents injury to the motor due to overloading from any cause such as low voltage or a tight belt. The protector resets itself after the windings have cooled. The motor, on all types, is easily accessible for servicing. Belt tension may be increased or decreased by merely adjusting the position of the motor forward or backward on the slotted base. Each motor is equipped with outlet box for connection of rigid or flexible conduit.

## SPECIFICATIONS: - 36- 42- AND 48-INCH FANS

**FRAME:** Steel, welded construction firmly braced.

**MOTOR:** "KS" Capacitor-Start, induction-run, resilient (rubber) hub-mounted with built-in thermal-overload motor protector. Oversize sleeve bearings grooved to distribute the oil evenly. Slotted base for adjustment of belt tension.

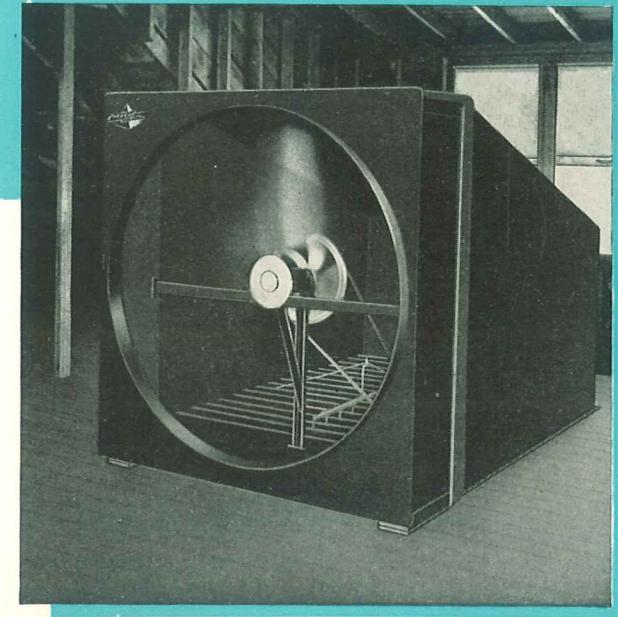
**FAN BLADE ASSEMBLY:** Four blades, perfectly balanced. Steel shaft operates on two sleeve-bearing pillow blocks.

**BELT:** V-type, sure-traction, non-stretching.

**FINISH:** Frame and motor finished in black enamel, blades in green enamel.

**ACCESSORIES FURNISHED:** Four rubber feet furnished for insulating fan housing from floor. Canvas boot for connecting fan housing to plenum chamber.

**GUARANTEE:** Emerson-Electric Standard One-Year Factory-to-User Guarantee.



### PLENUM CHAMBER AND CEILING SHUTTER

Emerson-Electric Plenum Chambers and Ceiling Shutters are not available at the present time, however, on installations where Plenum Chambers are required, they can be built and erected by the installer on the job.

### AUTOMATIC WALL-TYPE EXHAUST SHUTTERS

Automatic spring-balanced type, available for all \*four sizes of fans, when mounted on outside wall.

| For Fan Size | Pkd. Weight | Code Word |
|--------------|-------------|-----------|
|              |             |           |
| 24"          | 16          | JEWIC     |
| 36"          | 48          | JUSAF     |
| 42"          | 60          | JUDES     |
| 48"          | 78          | JUREF     |

\*Includes shutter for 24-inch fan listed on opposite page.

| Size Fan | Type No. | Speeds | Pulley No. | *R.P.M. |     | H.P. | Single-Phase |        | Watts | #C.F.M.<br>Free Air | Weight |      | Code Word |
|----------|----------|--------|------------|---------|-----|------|--------------|--------|-------|---------------------|--------|------|-----------|
|          |          |        |            | Motor   | Fan |      | Volts        | Cycles |       |                     | Net    | Pkd. |           |
| 36"      | 36-A     | 1      | AZ-20      | 1725    | 335 | 1/4  | 115          | 60     | 425   | 9,000               | 173    | 192  | TOHAS     |
| 42"      | 42-A     | 1      | AZ-25      | 1725    | 275 | 1/3  | 115/230      | 60     | 525   | 12,500              | 181    | 201  | TOMAX     |
| 48"      | 48-A     | 1      | BZ-25      | 1725    | 255 | 1/2  | 115/230      | 60     | 680   | 16,700              | 289    | 312  | TODAN     |

#C.F.M.—Cubic feet of air per minute. *Above values derived in tests made in accordance with the provisions of the Standard Code for Centrifugal and Axial Flow Fans, as established by The American Society of Heating and Vent-*

*ilating Engineers, and the National Association of Fan Manufacturers.*

\*R.P.M.—Revolutions per minute.

All data subject to change without notice.

# Emerson-Electric Belt Driven Cooler Fans

## Commercial and Industrial Installations

Where heretofore cost of equipment and installation has discouraged many smaller industrial plants, stores, shops, restaurants, bakeries, offices, and the like, from installing adequate ventilating equipment, they can now buy large-volume, quality-built Emerson-Electric Fans at extremely reasonable prices. Good business needs good air, and good air makes good business. People are more wide-awake, more willing to work or buy, in an atmosphere where the air is fresh and clean.

A practically unlimited variety of applications in industrial, commercial and institutional buildings has been developed for these powerful fans.

They are used in Foundries to exhaust excessive heat, gases and smoke; in Variety Stores, Auto-Sales Rooms, Mortuaries, Laboratories, Bakeries, and numerous other types of buildings to provide cool comfort for employees and patrons. Note the several different methods of installation on this page.

With fan capacities ranging from 5,000 to 16,700 C.F.M. it is a simple matter to provide the correct size fan or multiple units for any given requirement, from the average size store to the huge industrial plant.

Emerson-Electric Engineers will gladly cooperate in preparing fan specifications to overcome any bad-air condition. Merely furnish a rough layout of the area giving important details, such as measurements, location of openings, direction of prevailing winds, purpose for which used and number of people normally occupying the area.

### CONCISE PICTURE FACTS

1. Large foundry has 8—42-inch fans installed in Pent Houses on the roof.
2. Auto Sales room has 2—36-inch fans installed over show window. Single-story, flat roof building, formerly very hot in summer.
3. Variety Store has 42-inch fan installed in back of store pulling air from front door and transom.

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## Attic Installations in Homes

Emerson-Electric belted exhaust fans are also used to bring cool night breezes into the home through open windows and doors. This natural cool air, passing over the body, keeps the skin free of uncomfortable perspiration, permits the occupants to sleep soundly and pleasantly, to enjoy indoor recreation in cool comfort, and provides the same comfort in the home as an evening drive into the country (in an automobile). One of the outstanding features of the Emerson-Electric System of Home Cooling, by air circulation and ventilation, is its great flexibility. The number of air changes in any part of the house can easily be regulated by opening the windows in the rooms where cooling is desired and closing the windows in other parts of the house. The size of the home, and the size of the fan selected determines the number of rooms which may be cooled adequately, at one and the same time.

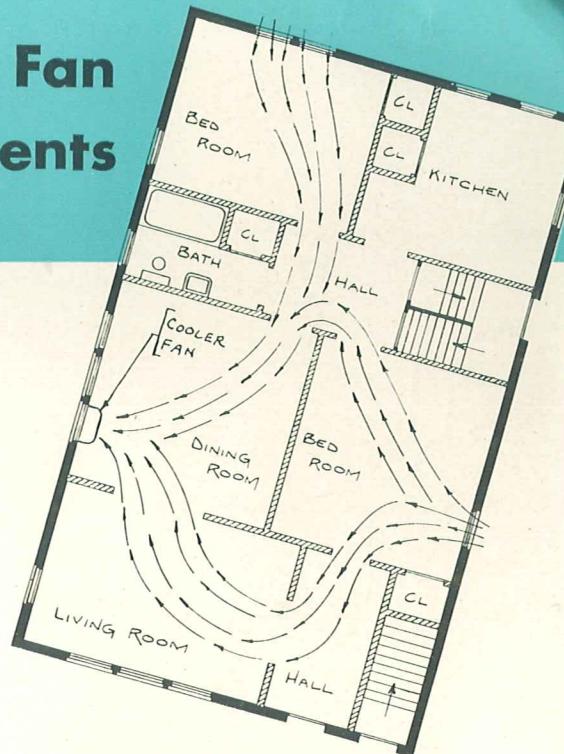
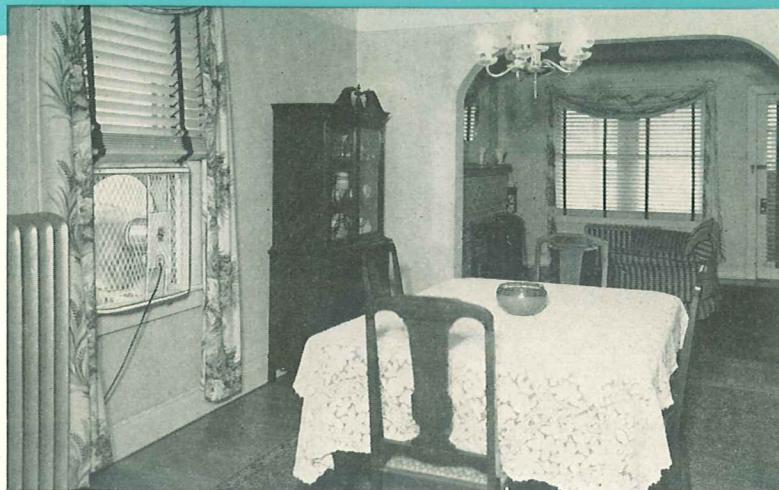


Installation of fan at wall opening. Air drawn up through stair well to third floor.



Installation of fan with plenum chamber. Air drawn through automatic shutter in second floor ceiling.

# New 20-inch Window-type Cooler Fan is Ideal for Small Homes, Apartments



Window-type Fans are a modern development in home cooling equipment. They are intended for small homes, apartments and tourist courts, also where several rooms in large homes may be handled as separate units. This fan has a maximum capacity of 3500 cubic feet of air per minute and is capable of giving rapid air circulation through the rooms of an average five-room home, as shown above.

Small stores, shops and offices will find these fans highly efficient in providing rapid air circulation and ventilation. The fan cabinet is ornamental and its beautiful ivory finish will harmonize with any surroundings.

To install this fan it is necessary merely to place two screw eyes in the window jamb and set the fan in place. The lower sash is raised to the top of the fan-blade opening and the fan is then ready for operation.



## Specifications

**MOTOR:** Specially wound, fan duty, capacitor-type; resilient hub-mounted, will not interfere with radio, quiet and economical to operate.

**SHAFT:** Solid steel  $\frac{5}{8}$ " diameter through bearings.

**BEARINGS:** Oversize sleeve bearings, grooved to distribute the oil evenly.

**LUBRICATION:** Large reservoirs packed with wool. Cotton wicking leads oil from both upper and lower reservoirs to shaft. Oiling once a season is usually sufficient.

**BLADES:** Formed from sheet aluminum. Large air delivery, penetrating breeze, quiet operation. Keyed to shaft and fastened with set screw.

### CABINET:

Expanded metal, ornamental grille—overall dimensions of cabinet 24" wide x 9" deep x 24" high, suitable for mounting in windows with a minimum opening 20" square.

**SWITCH:** Toggle switch on grille.  
**CORD AND PLUG:** Six-foot rubber covered cord and soft rubber plug—approved by Underwriters.

**FINISH:** Cabinet and motor attractively finished in baked ivory enamel with blades in polished aluminum.

| SIZE<br>FAN | SPEEDS | TYPE<br>No. | *R. P. M. | H. P.         | VOLTS | CYCLES | WATTS | *<br>C.F.M.<br>FREE<br>AIR | APPROX.<br>WEIGHT |      | CODE<br>WORD |
|-------------|--------|-------------|-----------|---------------|-------|--------|-------|----------------------------|-------------------|------|--------------|
|             |        |             |           |               |       |        |       |                            | NET               | PKD. |              |
| 20"         | 1      | 746310      | 925       | $\frac{1}{8}$ | 115   | 60     | 168   | 3500                       | 40                | 47   | TOFAP        |

\*R.P.M.—Revolutions per minute. \*C.F.M.—Cubic feet of air per minute. All data subject to change without notice.

EMERSON-ELECTRIC STANDARD ONE-YEAR FACTORY-TO-USER GUARANTEE

## Emerson-Electric Standard Factory-to-User Guarantee

Under the provisions of the Emerson-Electric Standard Factory-to-User Guarantee, all Emerson-Electric Fans are guaranteed to the original purchaser (the user) against electrical or mechanical defects for the period specified under each class of products. If any fan proves defective it will be repaired or replaced, at our option, without charge, when returned to the factory or Authorized Emerson-Electric Service Station, transportation charges prepaid. This Guarantee does not apply if repairs are made or attempted outside of the factory or by other than an Authorized Emerson-Electric Service Station.